



City Of New London

Department of Finance-Purchasing Agent
13 Masonic Street • New London, CT 06320 • Phone (860) 447-5215 • Fax (860) 447-5297

Request for Proposals

ADDENDUM # 1

Proposal No.: **2025-08 CONL**

Addendum No.: 1

Date Issued: May 20, 2025

Environmental Cleanup at 43 Hempstead Street

Opening Date and Time: June 3, 2025 @ 2:00 P.M.

Bidders Notes: This addendum is issued to provide all potential bidders with answers to questions submitted.

All other terms and conditions remain the same.

This Addendum cover page must be signed and returned with your bid.

Authorized Signature of Bidder

Company Name

Return Bid To:

Joshua Montague, Accounting Purchasing Agent
City of New London
13 Masonic Street
New London, CT 06320

Bids cannot be accepted after the Bid Opening Date and Time indicated above

2025-08 CONL

ADDENDUM 1

Environmental Cleanup at 43 Hempstead Street

RE: 2025-08 CONL
FROM: Joshua Montague, Accounting Purchasing Agent
TO: Prospective bidders

This Addendum shall be part of the Contract Documents and modifies the original bidding documents. This Addendum is to be acknowledged by the bidders on the Bid Form. Failure to do so may subject the bidder to disqualification.

Changes to prior Addenda:

- No prior Addenda have been issued.

Q&A:

- See attached documentation for Q&A and supplemental data.

General Items:

- Mandatory site visit sign-in sheet attached.



Memorandum

To: Tom Bombria
181 State St, 2nd Floor
New London, CT 06320

Date: May 19, 2025

Project #: 43340.00

From: Pamela Lind, LEP

Re: 43 Hempstead St Remediation Bidding Q&A

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1. Is there any analytical data available for the Environmental Cleanup at 43 Hempstead Street / 2025-08 CONL project?

Please use the sharefolder link that I have provided for the analytical results.

2. The fire hydrant will be enclosed in the new fence. Will the fire department allow this or will a modification to the fence be required?

The fire department will need access to the fire hydrant in an event of an emergency in the area. Therefore a gate with a chain lock with a cuttable link is acceptable, or a fence with interlocking sections that can be lifted off to open allowing easy access to the hydrant is also acceptable.

3. Does the contractor have to be a Licensed Spill Response contractor?

The contractor does not have to be a "licensed spill response" contractor but will be required to have one on-call for the project

Table 2
Soil Analytical Results
43 Hempstead Street, New London, CT

Location

Depth Interval

Sample Date

CT

Residential DEC

CT

GB-PMC

10x GWPC

B-2

0 - 2 ft

5 - 7 ft

VHB-SB-08

(7-8)

B-6 (Delta)

(0-4)

B-3

0 - 2 ft

3 - 5 ft

VHB-SB-07

(5-6)

B-7

0 - 2 ft

5 - 7 ft

VHB-SB-04

(3-5)

B-8

0 - 2 ft

5 - 7 ft

B-9

0 - 2 ft

3 - 5 ft

B-2 (Delta)

0 - 4 ft

B-2 (Delta)

4-5 ft

B-10

0 - 2 ft

2 - 4 ft

VHB-SB-01

(12-16)

(27-36)

B-4 (Delta)

0-4 ft

B-5 (Delta)

0-4 ft

MW-4

0 - 2 ft

2 - 4 ft

VHB-SB-05

(1-2)

(5-6)

VHB-SB-06

DUP (0.3-0.4)

(0.3-2.1)

(5-7)

B-3 (Delta)

0-4 ft

B-7 (Delta)

0-4 ft

VOCs (mg/kg)

1,2,4-Trimethylbenzene

500

28

NA

0.0014 > ND

0.0012 > ND

9.4

ND

0.0012 > ND

0.0011 > ND

NA

0.0012 > ND

0.0011 > ND

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

ND

NA

NA

ND

1,3,5-Trimethylbenzene

500

28

NA

0.0014 > ND

0.0012 > ND

NA

ND

0.0012 > ND

0.0011 > ND

NA

0.0012 > ND

0.0011 > ND

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

ND

NA

NA

ND

2-Butanone

500

80

NA

0.0071 > ND

0.0136

ND

ND

0.0061 > ND

0.0054 > ND

NA

0.0061 > ND

0.0057 > ND

ND

0.0064 >

0.0073 > ND

0.0058 > ND

0.0075 > ND

0.006 > ND

NA

ND

0.0083 > ND

0.026 > ND

NA

NA

NA

NA

NA

0.0073 > ND

0.0133

ND

NA

ND

ND

ND

NA

NA

ND

4-Isopropyltoluene

500

5

NA

0.0014 > ND

0.0012 > ND J

ND

ND

0.0012 > ND

0.0011 > ND J

NA

0.0012 > ND

0.0011 > ND J

ND

0.0013 >

0.0015 > ND J

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND J

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

Acetone

500

140

NA

0.0071 > ND

0.062

ND

ND

0.0061 > ND

0.0054 > ND

NA

0.0061 > ND

0.0078

ND

0.0064 >

0.0073 > ND

0.0101

0.0075 > ND

0.001

NA

ND

0.0117

0.026 > ND

NA

NA

NA

NA

NA

0.0073 > ND

0.0644

ND

NA

ND

ND

ND

NA

NA

ND

Ethylbenzene

500

10.1

NA

0.0071 > ND

0.00662 > ND J

ND

ND

0.0061 > ND

0.0054 > ND J

NA

0.0061 > ND

0.0057 > ND J

ND

0.0064 >

0.0073 > ND

0.0058 > ND

0.0075 > ND

0.006 > ND

NA

ND

0.0083 > ND

0.026 > ND

NA

NA

NA

NA

NA

0.0073 > ND

0.00073 >

0.00084 >

ND

NA

ND

ND

NA

NA

ND

Isopropylbenzene

500

5

NA

0.0014 > ND

0.0018

ND

ND

0.0012 > ND

0.0011 > ND

NA

0.0012 > ND

0.0011 > ND

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

Methylene chloride

82

1

NA

0.0036 > ND

0.0031 > ND

ND

ND

0.003 > ND

0.0027 > ND

NA

0.003 > ND

0.0028 > ND

ND

0.0032 >

0.0037 > ND

0.0029 > ND

0.0037 > ND

0.003 > ND

NA

ND

0.0041 > ND

0.013 > ND

NA

NA

NA

NA

NA

0.0037 > ND

0.0042 > ND

ND

NA

ND

ND

NA

NA

ND

Naphthalene

1000

56

NA

0.0036 > ND

0.0031 > ND J

3.9

ND

0.003 > ND J

0.0027 > ND J

NA

0.003 > ND J

0.0028 > ND J

ND

0.0032 >

0.0037 > ND J

0.0029 > ND

0.0037 > ND

0.003 > ND J

NA

ND

0.0041 > ND J

0.013 > ND J

NA

NA

NA

NA

NA

0.0037 > ND

0.0042 > ND

ND

NA

ND

ND

NA

NA

ND

n-Butylbenzene

500

70

NA

0.0014 > ND

0.0012 > ND J

2.4

ND

0.0012 > ND

0.0011 > ND J

NA

0.0012 > ND

0.0011 > ND J

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND J

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

n-Propylbenzene

500

10

NA

0.0014 > ND

0.0014 J

1.1

ND

0.0012 > ND

0.0011 > ND J

NA

0.0012 > ND

0.0011 > ND J

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND J

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

sec-Butylbenzene

500

70

NA

0.0014 > ND

0.0066 J

2.3

ND

0.0012 > ND

0.0011 > ND J

NA

0.0012 > ND

0.0011 > ND J

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND J

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

tert-Butylbenzene

500

70

NA

0.0014 > ND

0.0022

ND

ND

0.0012 > ND

0.0011 > ND J

NA

0.0012 > ND

0.0011 > ND J

ND

0.0013 >

0.0015 > ND

0.0012 > ND

0.0015 > ND

0.0012 > ND

NA

ND

0.0017 > ND

0.0052 > ND

NA

NA

NA

NA

NA

0.0015 > ND

0.0017 > ND

ND

NA

ND

ND

NA

NA

ND

PAHs (mg/kg)

2-Methylnaphthalene

270

5.6

NA

0.0354

0.0039 > ND

NA

NA

0.0571

0.0262

ND

0.0136

0.0042 > ND

ND

0.0141

0.0295

0.004 > ND

0.0038 > ND

0.0035 > ND

NA

NA

0.0733

0.009

NA

ND

NA

NA

NA

NA

0.0989

0.00562

ND

NA

ND

ND

NA

NA

NA

Acenaphthene

1000

84

NA

0.00881 J

0.0039 > ND J

NA

NA

0.13 J

0.0402 J

ND

0.00497 J

0.0042 > ND J

ND

0.0259 J

0.0459 J

0.004 > ND J

0.0038 > ND

0.0035 > ND

NA

NA

0.02 > ND J

0.0036 > ND

NA

ND

NA

NA

NA

NA

0.161 J

0.0045 > ND

ND

NA

ND

ND

NA

NA

NA

Acenaphthylene

1000

84

NA

0.0533 J

0.0039 > ND J

NA

NA

0.568 J

0.223 J

ND

0.0354 J

0.0223 J

ND

0.0597 J

0.0953 J

0.004 > ND J

0.0035 > ND

NA

NA

0.192 J

0.00868 J

NA

ND

NA

NA

NA

NA

NA

0.556 J

0.00687 J

ND

NA

ND

ND

NA

NA

NA

Anthracene

1000

400

NA

0.0703 J

0.0039 > ND J

NA

NA

0.956 J

0.535 J

ND

0.0388 J

0.0042 > ND J

ND

0.106 J

0.184 J

0.004 > ND J

0.00619 J

0.0035 > ND

NA

NA

0.101 J

0.00539 J

NA

ND

NA

NA

NA

NA

1.12 J

0.0126 J

ND

NA

ND

ND

NA

NA

NA

Benzo(a)anthracene

1

1

NA

0.153 J

0.0039 > ND J

NA

NA

4.04 J

2.04 J

ND

0.149 J

0.0042 > ND J

ND

0.444 J

1.05 J

0.004 > ND J

0.0334 J

0.0035 > ND

NA

NA

0.436 J

0.0365 J

NA

ND

NA

NA

NA

NA

2.72 J

0.0362 J

ND

NA

ND

ND

NA

NA

NA

Benzo(a)pyrene

1

1

NA

0.1 J

0.0039 > ND J

NA

NA

3.38 J

1.78 J

ND

0.154 J

0.0042 > ND J

ND

0.428 J

0.969 J

0.004 > ND J

0.039 J

0.127 J

NA

NA

0.608 J

0.069 J

NA

ND

NA

NA

NA

NA

2.13 J

0.0311 J

ND

NA

ND

ND

NA

NA

NA

Benzo(b)fluoranthene

1

1

NA

0.194 J

0.0039 > ND J

NA

NA

5.11 J

2.89 J

ND

0.265 J

0.0042 > ND J

ND

0.593 J

1.33 J

0.004 > ND J

0.0594 J

0.0272 J

NA

NA

0.932 J

0.109 J

NA

ND

NA

NA

NA

NA

3 J

0.0625 J

ND

NA

ND

ND

NA

NA

NA

Benzo(g,h,i)perylene

8.4

1

NA

0.0677 J

0.0039 > ND J

NA

NA

2.09 J

1.37 J

ND

0.122 J

0.0042 > ND J

ND

0.314 J

0.661 J

0.004 > ND J

0.0353 J

0.0785 J

NA

NA

0.786 J

0.124 J

NA

ND

NA

NA

NA

NA

1.19 J

0.0287 J

ND

NA

ND

ND

NA

NA

NA

Benzo(k)fluoranthene

8.4

1

NA

0.0636 J

0.0039 > ND J

NA

NA

1.64 J

0.982 J

ND

0.0767 J

0.0042 > ND J

ND

0.152 J

0.509 J

0.004 > ND J

0.0219 J

0.0305 > ND

NA

NA

0.326 J

0.0392 J

NA

ND

NA

NA

NA

NA

1 J

0.0195 J

ND

NA

ND

ND

NA

NA

NA

Chrysene

84

7

NA

0.162 J

0.0039 > ND J

NA

NA

4.21 J

2.14 J

ND

0.173 J

0.0042 > ND J

ND

0.418 J

0.957 J

0.004 > ND J

0.0378 J

0.0554 J

NA

NA

0.563 J

0.0561 J

NA

ND

NA

NA

NA

NA

2.41 J

0.0379 J

ND

NA

ND

ND

NA

NA

NA

Dibenz(a,h)anthracene

7

7

NA

0.0242 J

0.0039 > ND J

NA

NA

0.663 J

0.324 J

ND

0.0351 J

0.0042 > ND J

ND

0.0725 J

0.147 J

0.004 > ND J

0.00849 J

0.0103 J

NA

NA

0.179 J

0.0231 J

NA

ND

NA

NA

NA

NA

0.349 J

0.0089 J

ND

NA

ND

ND

NA

NA

NA

Fluoranthene

1000

56

NA

0.322 J

0.0039 > ND J

NA

NA

8.67 J

3.85 J

ND

0.788 J

1.72 J

0.004 > ND J

0.0499 J

0.00419 J

NA

NA

0.707 J

0.0458 J

NA

ND

NA

NA

NA

NA

NA

NA

NA

4.98 J

0.0551 J

ND

NA

ND

ND

NA

NA

NA

Fluorene

1000

56

NA

0.0186

0.0039 > ND J

NA

NA

0.279

0.125

ND

0.00831

0.0042 > ND

ND

0.0272

0.0436

0.004 > ND

0.0038 > ND

0.0035 > ND

NA

NA

0.303

0.0036 > ND

NA

ND

NA

NA

NA

NA

0.447 J+

0.0045 > ND

ND

NA

ND

ND

NA

NA

NA

Hexachlorobenzene

1

1

NA

0.0074 > ND

0.0008 > ND

NA

NA

0.00072 J

0.00073 > ND

ND

0.0018 J

0.00082 > ND

ND

0.0008

0.00079 > ND

0.00083 J

0.0017

0.00067 > ND

NA

NA

0.0008 J

0.0007 > ND

NA

ND

NA

NA

NA

NA

0.0031 J

0.0009 > ND

ND

NA

ND

ND

NA

NA

NA

Indeno(1,2,3-cd)pyrene

7

7

NA

0.0744 J

0.0039 > ND J

NA

NA

2.37 J

1.37 J

ND

0.298 J

0.0042 > ND J

ND

0.298 J

0.656 J

0.004 > ND J

0.0334 J

0.015 J

NA

NA

0.686 J

0.103 J

NA

ND

NA

NA

NA

NA

1.28 J

0.0264 J

ND

NA

ND

ND

NA

NA

NA

Naphthalene

1000

56

NA

0.0989 J

0.00681 J

NA

NA

0.191 J

0.0964 J

ND

0.018 J

0.0042 > ND J

ND

0.0422 J

0.139 J

0.004 > ND J

0.0038 > ND

0.00632 J

NA

NA

0.0481 J

0.00633 J

NA

ND

NA

NA

NA

NA

0.172 J

0.0129 J

ND

NA

ND

ND

NA

NA

NA

Phenanthrene

1000

40

NA

0.32

0.0039 > ND

NA

NA

5.05

2.38

ND

0.142

0.0042 > ND

ND

0.475

0.765 J+

0.004 > ND

0.027

0.0234

NA

NA

0.474

0.0394

NA

ND

NA

NA

NA

NA

4.41 J+

0.045

ND

NA

ND

ND

NA

NA

NA

Pyrene

1000

40

NA

0.275 J

0.0039 > ND J

NA

NA

7.78 J

4.06 J

ND

0.258 J

0.0042 > ND

ND

0.799 J

1.72 J

0.004 > ND J

0.0517 J

0.0231 J

NA

NA

0.713 J

0.0483 J

NA

ND

NA

NA

NA

NA

4.76 J

0.0447 J

ND

NA

ND

ND

NA

NA

NA

SRP PAHs (mg/L)

2-Methylnaphthalene

270

5.6

0.28

NA

NA

NA

NA

R

R

NA

NA

NA

NA

0.000423 J-

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

0.00041 J-

NA

NA

NA

NA

NA

NA

NA

Acenaphthene

1000

84

4.2

NA

NA

NA

NA

R

R

NA

NA

NA

NA

0.000442 J-

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

0.00175 J-

NA

NA

NA

NA

NA

NA

NA

Acenaphthylene

1000

84

4.2

NA

NA

NA

NA

R

R

NA

NA

NA

NA

0.000332 J-

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

0.00184 J-

NA

NA

NA

NA

NA

NA

NA

Anthracene

1000

400

20

NA

NA

NA

NA

R

R

NA

NA

NA

NA

0.000332 J-

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

NA

0.000878 J-

NA

NA

NA

NA

NA

NA

NA

Benzo(a)anthracene

1

1

0.0006

NA

NA

NA

NA

R

R

NA

NA

NA

<

CTDEEP RSRs- Connecticut Department of Energy and Environmental Protection Remediation Standard Regulations (February 16, 2021) and *Technical Support Document: Recommended Numeric Criteria for Common Additional Polluting Substances and Certain Alternative Criteria* (March 25, 2022).

Criteria in *italics* note parameters that are CTDE
Polluting Substances (September 20, 2018)

RES DEC = Residential Direct Exposure Criteria.

GB PMC = GB Pollutant Mobility Criteria.

Only parameters reported above detection limits are summarized above

mg/kg = milligrams per kilogram.

CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons
VOCs- Volatile Organic Compounds

PAHs- Polycyclic Aromatic Hydrocarbons

PCBs - Polychlorinated Biphenyls
ND = not detected, see laboratory reports for specific detection

ND = Not detected, see laboratory reports for specific detection limits.

<## = not detected, detection limit provided

R - rejected
NA = not analyzed for this comparison

NE = no criteria established.

Bold/Underlined values indicate exceedances of GB PMC

Gray shaded values indicate exceedance of RES DEC



Table 2
Soil Analytical Results
43 Hempstead Street, New London, CT

Location	CT	CT	MW-5		MW-6		VHB-SB-02	VHB-SB-03	B-8 (Delta)	MW-1R		VHB-SB-09	Trip Blank	MW-1 (Delta)		MW-2 (Delta)		B-9 (Delta)		B-10 (Delta)		B-11 (Delta)	B-12 (Delta)	B-13 (Delta)
Depth Interval	Residential DEC	G8-PMC	0 - 2 ft	8 - 10 ft	0 - 2 ft	3 - 5 ft	(5-7)	(5.5-6.7)	0-4 ft	0 - 2 ft	4 - 6 ft	(5-7)	Trip Blank	0-2 ft	4-6 ft	0-2 ft	4-6 ft	0-2 ft	2-4 ft	0-2 ft	2-4 ft	0-2 ft	0-2 ft	
Sample Date			08/09/2021	08/09/2021	08/09/2021	08/09/2021	02/06/2024	02/06/2024	08/08/2000	08/10/2021	08/10/2021	02/06/2024	02/06/2024	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	05/09/2001	
VOCs (mg/kg)																								
1,2,4-Trimethylbenzene	500	28	0.0011 > ND	0.001 > ND	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	250	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	500	28	0.0011 > ND	0.001 > ND	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	89	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	500	80	0.0055 > ND	0.005 > ND	0.008 > ND	0.012 > ND	NA	NA	ND	0.0061 > ND	0.0092 > ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	500	5	0.0011 > ND	0.001 > ND J	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	41	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	500	140	0.0055 > ND	0.0128	0.008 > ND	0.0156	NA	NA	ND	0.0061 > ND	0.0092 > ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	500	10.1	0.0055 > ND	0.0005 > ND J	0.0008 > ND	0.0012 > ND	NA	NA	ND	0.00061 > ND	0.00092 >	0.69	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	500	5	0.0011 > ND	0.001 > ND	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	14	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene chloride	82	1	0.0028 > ND	0.0025 > ND	0.004 > ND	0.0058 > ND	NA	NA	ND	0.0031 > ND	0.0046 > ND	39	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1000	56	0.0028 > ND	0.0025 > ND J	0.004 > ND J	0.0058 > ND	NA	NA	ND	0.0031 > ND	0.0046 > ND	39	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	500	70	0.0011 > ND	0.001 > ND J	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	35	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	500	70	0.0011 > ND	0.001 > ND J	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	41	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	500	70	0.0011 > ND	0.001 > ND J	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	36	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	500	70	0.0011 > ND	0.001 > ND	0.0016 > ND	0.0023 > ND	NA	NA	ND	0.0012 > ND	0.0018 > ND	7.9	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (mg/kg)																								
2-Methylnaphthalene	270	5.6	0.0035 > ND	0.0038 > ND	0.585	0.51	ND	ND	NA	0.115	0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1000	84	0.0035 > ND	0.0038 > ND J	0.0073 > ND	0.247 J	ND	ND	NA	0.252 J	0.0179 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1000	84	0.0035 > ND	0.0038 > ND J	0.0541 J	0.394 J	ND	ND	NA	0.629 J	0.066 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1000	400	0.0035 > ND	0.0038 > ND J	0.0448 J	1.04 J	ND	ND	NA	1.35 J	0.0904 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	0.0035 > ND	0.0038 > ND J	0.0895 J	1.45 J	ND	ND	NA	3.15 J	0.338 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	0.00352 J	0.0038 > ND J	0.0732 J	0.984 J	ND	ND	NA	2.42 J	0.249 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	0.00642 J	0.0038 > ND J	0.172 J	1.37 J	ND	ND	NA	2.98 J	0.472 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)pyrene	8.4	1	0.0035 > ND	0.0038 > ND J	0.146 J	0.539 J	ND	ND	NA	1.58 J	0.18 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	8.4	1	0.0035 > ND	0.0038 > ND J	0.0445 J	0.448 J	ND	ND	NA	1.46 J	0.135 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	84	7	0.00457 J	0.0038 > ND J	0.206 J	1.24 J	ND	ND	NA	2.82 J	0.359 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	7	7	0.0035 > ND	0.0038 > ND J	0.0233 J	0.151 J	ND	ND	NA	0.441 J	0.057 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1000	56	0.00764 J	0.0038 > ND J	0.175 J	3.28 J	ND	ND	NA	5.57 J	0.662 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1000	56	0.0035 > ND	0.0038 > ND	0.0338	0.609	ND	ND	NA	0.347	0.0322	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1	1	0.00067 > ND	0.00074 > ND	0.0044 J	0.00077 > ND	ND	ND	NA	0.00066 > ND	0.00072 >	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	7	7	0.0035 > ND	0.0038 > ND J	0.0842 J	0.581 J	ND	ND	NA	1.56 J	0.165 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1000	56	0.0035 > ND	0.0038 > ND J	0.328 J	1.49 J	ND	ND	NA	0.164 J	0.0811 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1000	40	0.0055	0.0038 > ND	0.286	4.46 J+	ND	ND	NA	6.3	0.532	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1000	40	0.007 J	0.0038 > ND J	0.182 J	2.95 J	ND	ND	NA	5.21 J	0.671 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP PAHs (mg/L)																								
2-Methylnaphthalene	270	5.6	NA	NA	NA	0.000484 J-	NA	NA	NA	0.00264 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1000	84	NA	NA	NA	0.00143 J-	NA	NA	NA	0.00134 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1000	84	NA	NA	NA	0.000916 J-	NA	NA	NA	0.000497 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1000	400	NA	NA	NA	0.000764 J-	NA	NA	NA	0.000193 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	NA	NA	NA	0.000241 J-	NA	NA	NA	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	NA	NA	NA	0.000119 J-	NA	NA	NA	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	NA	NA	NA	0.000189 J-	NA	NA	NA	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	84	7	NA	NA	NA	0.000215 J-	NA	NA	NA	R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1000	56	NA	NA	NA	0.00192 J-	NA	NA	NA	0.000224 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1000	56	NA	NA	NA	0.00152 J-	NA	NA	NA	0.00163 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1000	56	NA	NA	NA	0.000337 J-	NA	NA	NA	0.000694 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1000	40	NA	NA	NA	0.00284 J-	NA	NA	NA	0.0018 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1000	40	NA	NA	NA	0.00163 J-	NA	NA	NA	0.000176 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CT ETPH (mg/kg)																								
Diesel Range Organics (C9-)	500	2,500	16.7	15.5	214 J-	2020	ND	ND	NA	158	64.6	2030	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPLP Petroleum																								
Diesel Range Organics (C9-)	NE	NE	NA	NA	NA	0.098 J-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides (mg/kg)																								
4,4'-DDD	1.8	NE	0.00067 > ND	0.00074 > ND J	0.00058 >	0.0751 J	NA	NA	NA	0.00066 > ND	0.0089 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	1.8	NE	0.00067 > ND	0.00074 > ND J	0.0082 J	0.00077 > ND	NA	NA	NA	0.00066 > ND	0.0015 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	1.8	0.02	0.00067 > ND	0.00074 > ND J	0.0207 J	0.00077 > ND	NA	NA	NA	0.00066 > ND	0.0081 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (mg/kg)																								
Aroclor 1254	--	--	0.048 > ND	0.049 > ND	0.054 > ND	0.055 > ND	NA	NA	NA	0.053 > ND	0.056 > ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor, Total	1	--	0.048 > ND	0.049 > ND	0.054 > ND	0.055 > ND	NA	NA	NA	0.053 > ND	0.056 > ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (mg/kg)																								
Antimony	27	0.06	2.1 > ND J	2.4 > ND J	2.1 > ND J	12 > ND J	NA	NA	NA	2.2 > ND J	2.2 > ND J	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	10	0.5	2.4	2.4 > ND	51.9	49.1	NA	NA	NA	6.2	5.7	2.66	NA	NA	4.4	ND	2.7	3.9	24	3.2	18	12	3.7	38
Barium	4700	10	21 > ND	60.3	115	34.3	NA	NA	NA	72.9	147	108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 4
Groundwater Analytical Results
43 Hempstead Street, New London, CT

Location		MW-2				MW-3				DUP (MW-3)	MW-4	MW-5	MW-6			
Sample Date	CT SWPC	05/18/2001	08/18/2021	05/18/2001	08/18/2021	01/17/2024	07/09/2024	11/19/2024	08/18/2021	08/19/2021	08/18/2021	08/18/2021	01/17/2024	07/09/2024	11/19/2024	01/17/2024
Sample Type		N				N				FD	N	N	N	N	N	N
VOCs (ug/L)																
1,2,4-Trimethylbenzene	150	ND	2 > ND	ND	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	NA	ND
2-Butanone	10000	ND	10 > ND	ND	10 > ND	ND	ND	ND	10 > ND	10 > ND	10 > ND	10 > ND	ND	ND	NA	ND
Acetone	10000	ND	10 > ND	ND	10 > ND	ND	ND	ND	10 > ND	10 > ND	10 > ND	10 > ND	ND	ND	NA	ND
Acrylonitrile	20	ND	10 > ND	ND	10 > ND	ND	ND	ND	10 > ND	10 > ND	10 > ND	10 > ND	ND	ND	NA	ND
Benzene	710	ND	0.5 > ND	ND	0.5 > ND	ND	ND	ND	0.5 > ND	0.5 > ND	0.5 > ND	0.5 > ND	ND	ND	NA	ND
Chloroform	14100	ND	1 > ND	ND	1 > ND	ND	ND	ND	1 > ND	1 > ND	1 > ND	1 > ND	ND	ND	NA	ND
Isopropylbenzene	210	ND	1 > ND	ND	1 > ND	ND	ND	ND	1 > ND	1 > ND	1 > ND	1 > ND	ND	ND	NA	ND
Naphthalene	210	ND	5 > ND	ND	5 > ND	ND	ND	ND	5 > ND	5 > ND	5 > ND	23.1	ND	ND	NA	ND
n-Propylbenzene	10000	ND	2 > ND	ND	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	NA	ND
sec-Butylbenzene	10000	ND	2 > ND	ND	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	1.11	NA	ND
tert-Butylbenzene	10000	ND	2 > ND	ND	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	NA	ND
PAHs (ug/L)																
2-Methylnaphthalene	62	NA	57.3	NA	33.7	ND	ND	ND	27.2	35.6	38.1	937	ND	ND	ND	ND
Acenaphthene	150	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.523	ND	ND	0.17	ND
Acenaphthylene	0.3	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.639	ND	ND	0.15	ND
Anthracene	1100000	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.231	ND	ND	0.05	ND
Benzo(a)anthracene	0.3	NA	0.038 > ND	NA	0.037 > ND	ND	ND	ND	0.036 > ND	0.037 > ND	0.036 > ND	0.04 > ND	ND	ND	ND	ND
Benzo(a)pyrene	0.3	NA	0.038 > ND	NA	0.037 > ND	ND	ND	ND	0.036 > ND	0.037 > ND	0.036 > ND	0.04 > ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.3	NA	0.038 > ND	NA	0.037 > ND	ND	ND	ND	0.036 > ND	0.037 > ND	0.036 > ND	0.04 > ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	150	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.08 > ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.3	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.08 > ND	ND	ND	ND	ND
Chrysene	0.54	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.08 > ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	0.3	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.08 > ND	ND	ND	ND	ND
Fluoranthene	3700	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.122	0.071 > ND	0.198	ND	ND	0.06	ND
Fluorene	140000	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.572	ND	ND	0.19	ND
Indeno(1,2,3-cd)pyrene	0.54	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.074 > ND	0.071 > ND	0.08 > ND	ND	ND	ND	ND
Hexachlorobenzene	0.077	NA	0.0083 > ND	NA	0.012	NA	NA	NA	0.012	0.008 > ND	0.008 > ND	0.0085 > ND	NA	NA	NA	NA
Naphthalene	210	NA	0.077 > ND	NA	0.074 > ND	0.0588	ND	ND	0.071 > ND	0.0745	0.071 > ND	7.28	0.435	0.0674 B	0.8700	0.422
Phenanthrene	14	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.106	0.071 > ND	0.946	ND	ND	0.22	ND
Pyrene	110000	NA	0.077 > ND	NA	0.074 > ND	ND	ND	ND	0.071 > ND	0.114	0.071 > ND	0.17	ND	ND	0.5	ND
1,4-Dioxane	960	NA	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	ND	ND	NA	ND
CT ETPH (mg/L)																
Extractable Total Petroleum Hydrocarbons	0.25	NA	0.11 > ND	NA	0.1 > ND	0.191	ND	ND	0.11 > ND J	0.1 > ND	0.11 > ND	0.11 > ND	0.323	0.215	0.183	0.247
Pesticides (ug/L)																
Varies	---	NA	0.0083 > ND	NA	0.0082 > ND	NA	NA	NA	0.0078 > ND	0.008 > ND	0.008 > ND	0.0085 > ND	NA	NA	NA	NA
PCBs (ug/L)																
Varies	---	NA	0.083 > ND	NA	0.082 > ND	NA	NA	NA	0.078 > ND	0.08 > ND	0.08 > ND	0.085 > ND	NA	NA	NA	NA
Metals (ug/L)																
Arsenic	4	NA	2 > ND	NA	2.4	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	ND	ND
Barium	2200	NA	153	NA	136	71.3	105	97.2	111	86.2	81.7	35.9	21.1	20	22.5	21.1
Beryllium	4	NA	2 > ND	NA	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	ND	ND
Cadmium	6	NA	2 > ND	NA	2 > ND	ND	ND	ND	2 > ND	2 > ND	2 > ND	2 > ND	ND	ND	ND	ND
Chromium	1200	NA	2 > ND	NA	10.8	8.13	2	ND	3.1	2 > ND	2 > ND	2 > ND	8.06	5	ND	8.75
Copper	48	NA	2 > ND J	NA	3.6 J	3.6	1.2	ND	8.2 J	2 > ND J	2 > ND J	2 > ND J	2.6	2.1	2.19	2.62
Lead	13	NA	2 > ND J	NA	30.2 J	ND	ND	ND	6.7 J	2 > ND J	2.1 > ND J	2 > ND J	ND	ND	ND	ND
Nickel	880	NA	2 > ND	NA	3.9	ND	2.7	ND	2 > ND	2.2	2 > ND	3.1	1.69	2.8	2.36	1.94
Selenium	50	NA	2 > ND	NA	3.7	1.22	ND	6.8	2 > ND	2 > ND	2 > ND	5.26	ND	1.89	4.54	4.54
Vanadium	270	NA	2 > ND J	NA	13.6 J	ND	28.7	ND	3.8 J	2 > ND J	2 > ND J	2 > ND J	ND	23.1	ND	ND
Zinc	123	NA	65.6 J	NA	75.8 J	68.7	48	22.8	36.3 J	4.4 J	6.3 J	5.1 J	19.5	11	51.2	20.7

CTDEEP RSRs - Connecticut Department of Energy and Environmental Protection Remediation Standard Regulations (February 16, 2021) and Technical Support Document: Recommended Numeric Criteria for Common Additional Polluting Substances and Certain Alternative Criteria (March 25, 2018)

Criteria in *italics* note parameters that are CTDEEP Additional Polluting Substances (September 20, 2018)

< = not detected, see laboratory reports for specific detection limits.
Only parameters reported above detection limits are summarized above
Results presented in micrograms per liter (ug/L)

---: Sample detections per COC vary

SWPC - Surface Water Protection Criteria

CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons

VOCs - Volatile Organic Compounds

PAHs - Polycyclic Aromatic Hydrocarbons

PCBs - Polychlorinated Biphenyls

NE = no criteria established.

Grey shaded values indicate exceedance of the SWPC

Table 4
Groundwater Analytical Results
43 Hempstead Street, New London, CT

Location		DUP (MW-6)		MW-1	MW-1R				VHB-MW-01		Trip Blank	
Sample Date	CT	07/09/2024	11/19/2024	05/18/2001	08/19/2021	01/17/2024	07/09/2024	11/19/2024	07/09/2024	11/19/2024	01/17/2024	07/09/2024
Sample Type	SWPC	N	N	N	N	N	N	N	G	G	N	N
VOCs (ug/L)												
1,2,4-Trimethylbenzene	150	ND	ND	ND	2 > ND	ND	ND	ND	212	27.3	ND	ND
2-Butanone	10000	ND	ND	ND	10 > ND	ND	ND	ND	0.6	ND	ND	ND
Acetone	10000	ND	ND	ND	10 > ND	ND	ND	ND	10.9	ND	ND	ND
Acrylonitrile	20	ND	ND	ND	10 > ND	ND	ND	ND	ND	ND	ND	0.79
Benzene	710	ND	0.6	ND	0.5 > ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	14100	ND	ND	ND	7.1	1.91	2.16	0.7	ND	ND	ND	ND
Isopropylbenzene	210	ND	ND	ND	1 > ND	ND	ND	ND	7.39	3.23	ND	ND
Naphthalene	210	ND	ND	ND	5 > ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	10000	ND	ND	ND	2 > ND	ND	ND	ND	5.16	1.5	ND	ND
sec-Butylbenzene	10000	1.17	0.94	ND	2 > ND	ND	ND	ND	2.58	2.08	ND	ND
tert-Butylbenzene	10000	ND	ND	ND	2 > ND	ND	ND	ND	2.85	2.6	ND	ND
PAHs (ug/L)												
2-Methylnaphthalene	62	ND	ND	NA	21.9	ND	ND	ND	ND	ND	NA	NA
Acenaphthene	150	0.17 B	0.21	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Acenaphthylene	0.3	0.05 B	0.19	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Anthracene	1100000	ND	0.28	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Benzo(a)anthracene	0.3	ND	ND	NA	0.038 > ND	ND	ND	ND	ND	ND	NA	NA
Benzo(a)pyrene	0.3	ND	ND	NA	0.038 > ND	ND	ND	ND	ND	ND	NA	NA
Benzo(b)fluoranthene	0.3	ND	ND	NA	0.0517	ND	ND	ND	ND	ND	NA	NA
Benzo(g,h,i)perylene	150	ND	ND	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Benzo(k)fluoranthene	0.3	ND	ND	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Chrysene	0.54	ND	ND	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Dibenz(a,h)anthracene	0.3	ND	ND	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Fluoranthene	3700	ND	0.07	NA	0.077 > ND	ND	ND	ND	ND	0.05	NA	NA
Fluorene	140000	0.07	0.24	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Indeno(1,2,3-cd)pyrene	0.54	ND	ND	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Hexachlorobenzene	0.077	NA	NA	NA	0.0088	NA	ND	NA	ND	ND	NA	NA
Naphthalene	210	0.29 B	1.15	NA	0.077 > ND	0.0588	ND	ND	ND	ND	NA	NA
Phenanthrene	14	0.08	0.26	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
Pyrene	110000	ND	0.05	NA	0.077 > ND	ND	ND	ND	ND	ND	NA	NA
1,4-Dioxane	960	ND	NA	NA	NA	ND	ND	NA	ND	ND	NA	NA
CT ETPH (mg/L)												
Extractable Total Petroleum Hydrocarbons	0.25	0.204	0.341	NA	0.11 > ND	0.191	ND	ND	0.26	0.618	NA	NA
Pesticides (ug/L)												
Varies	---	NA	NA	NA	0.0085 > ND	NA	NA	NA	NA	NA	NA	NA
PCBs (ug/L)												
Varies	---	NA	NA	NA	0.085 > ND	NA	NA	NA	NA	NA	NA	NA
Metals (ug/L)												
Arsenic	4	ND	ND	NA	2 > ND	ND	ND	ND	ND	8.47	NA	NA
Barium	2200	19	23.1	NA	60.2	117	66	45.5	194	477	NA	NA
Beryllium	4	ND	ND		2 > ND	ND	ND	ND	ND	ND	NA	NA
Cadmium	6	ND	ND		2 > ND	ND	ND	ND	0.9	ND	NA	NA
Chromium	1200	8	ND	NA	4.6	7.91	5	ND	3	1.43	NA	NA
Copper	48	2.2	1.92	NA	5.43	1.24	1.1	ND	3.9	ND	NA	NA
Lead	13	ND	ND	NA	43.73	ND	ND	ND	5.9	6.02	NA	NA
Nickel	880	3	2.29	NA	2	2.31	2.4	1.66	13.6	39.1	NA	NA
Selenium	50	ND	2.35	NA	2 > ND	4.92	ND	ND	ND	1.37	NA	NA
Vanadium	270	51.7	ND	NA	5.73	ND	39.9	ND	33.3	ND	NA	NA
Zinc	123	13	31.7	NA	19.93	152	50	33.4	466	322	NA	NA

CTDEEP RSRs - Connecticut Department of Energy and Environmental Protection Remediation Standard Regulations (February 16, 2021) and Technical Support Document: Recommended Numeric Criteria for Common Additional Polluting Substances and Certain Alternative Criteria (March 25, 2022)

Criteria in *italics* note parameters that are CTDEEP Additional Polluting Substances (September 20, 2018)

< = not detected, see laboratory reports for specific detection limits.

Only parameters reported above detection limits are summarized above

Results presented in micrograms per liter (ug/L)

---: Sample detections per COC vary

SWPC - Surface Water Protection Criteria

CT ETPH - Connecticut Extractable Total Petroleum Hydrocarbons

VOCs - Volatile Organic Compounds

PAHs - Polycyclic Aromatic Hydrocarbons

PCBs - Polychlorinated Biphenyls

NE = no criteria established.

Grey shaded values indicate exceedance of the SWPC

Table 5
PFAS Groundwater Analytical Results
43 Hempstead Street, New London, CT



Location	Drinking Water/Groundwater Action Levels	Groundwater Protection Criteria	MW-1R			MW-3			MW-6			DUP (MW-6)			VHB-MW-01		VHB-MW-02	
Date			1/17/2024	7/9/2024	11/19/2024	1/17/2024	7/9/2024	11/19/2024	1/17/2024	7/9/2024	11/19/2024	1/17/2024	7/9/2024	11/19/2024	7/9/2024	11/19/2024	7/9/2024	11/19/2024
PFAS by EPA Method 1633 (ng/L)																		
Perfluorobutanesulfonic acid (PFBS)	760	NE	22.1	24.2	13.8	93.3	179	134	7.87	3.94	30.2	7.23	3.53	31.4	43.1	51.1	152	86.3
Perfluorohexanoic acid (PFHxA)	240	NE	9.12	16	9	78	152	108	5.33	13.2	22.5	4.94	13.2	21.4	22.9	18.1	168	76
Perfluorohexanoic acid (PFHxA)	NE	NE	5.84	9.73	7.66	16.7	ND	28.2	5.18	6.15	6.47	5.01	5.48	7.55	16	7.14	ND	22.4
Perfluorohexanesulfonic acid (PFHxS)	49	NE	60.8	89.5	29.3	1370	4620	1820	3.45	7.59	4.37	3.48	2.65	4.02	205	242	4180	1280
Perfluorooctanoic acid (PFOA)	16	NE	14.4	24	12.8	35.8	ND	66.2	13.1	16.3	17.9	14	15.8	17.7	33.8	16.7	ND	43.4
Perfluorooctanesulfonic acid (PFOS)	10	NE	7.31	15.1	21.1	3040	9450	3370	30.4	68.4	53.3	24.3	50.1	45.7	9.76	59.6	8800	2820
Perfluorononanoic acid (PFNA)	12	NE	1.57	1.67	1.5	5.29	ND	7.79	0.877	0.778	1.44	ND	1.1	ND	1.51	ND	ND	6.84
Perfluoropentanoic acid (PFPeA)	NE	NE	9.24	20.7	10.3	33.1	68.8	48.3	0.605	15.1	17.1	5.31	15.2	17.9	15.9	11.2	66.5	30.6
Perfluoro-1-heptanesulfonic acid (PFHpS)	NE	NE	2.57	3.53	ND	122	167	96.2	ND	ND	ND	ND	ND	ND	5.27	3.63	187	71.5
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	NE	NE	ND	ND	ND	7.12	ND	21.2	ND	ND	27.2	ND	ND	ND	29.4	5.13	13.5	ND
Perfluoro-n-butanoic acid (PFBA)	1800	NE	0.368	8.95	5.96	15.4	65.7	25.5	ND	12.6	16.2	11.5	11.5	16.5	17.9	12	88.1	15.7
Perfluoro-5-oxahexanoic acid (PFMBA)	NE	NE	ND	ND	ND	ND	ND	ND	0.372	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-1-pentanesulfonate (PFPeS)	NE	NE	15.2	22.4	5.79	293	460	349	ND	0.741	0.724	1.03	ND	ND	57.7	70.6	366	203
Perfluoro-1-nonanesulfonic acid (PFNS)	NE	NE	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.19
CT Sum of 5 (PFOA, PFOS, PFNA, PFHxS, PFHpA)	NE	70	89.92	140	72.36	4467.73	14070	5292.19	53.007	99.218	83.48	46.79	75.13	74.97	266.07	325.44	12980	4172.64

Only detections above laboratory reporting limits listed

NE = Not Established

ND = Not Detected

Above DPH Drinking Water/DEEP Groundwater Action Levels

Above Groundwater Protection Criteria (GWPC)

DUP = Duplicate sample

Table 3
PFAS Soil Analytical Results
43 Hempstead Street, New London, CT



Location	GB PMC	RES DEC	VHB-SB-06 (0.3-2.1')	VHB-SB-13 (2.2-2.8')	VHB-SB-14 (1-1.8')	VHB-SB-15 (0-1')	VHB-SB-16 (2-2.9')	DUP (VHB-SB-16 (2-2.9'))	VHB-SB-16 (6-7.9')	VHB-SB-17 (0-1.4')	VHB-SB-18 (1-1.8')
Date			2/6/2024	7/1/2024	7/1/2024	7/1/2024	7/1/2024	7/1/2024	7/1/2024	7/1/2024	7/1/2024
PFAS by EPA Method 1633 (µg/kg)											
Perfluorobutanesulfonic acid (PFBS)	NE	NE	ND	ND	ND	ND	ND	0.145 J	ND	ND	ND
Perfluorohexanoic acid (PFHxA)	NE	NE	0.0933 J	ND	0.158 J	0.314	0.19 J	0.186 J	ND	0.144 J	0.0793 J
Perfluorohexanesulfonic acid (PFHxS)	NE	NE	ND	ND	0.352	0.615	4.43	5.1	1.27	ND	0.315
Perfluorooctanoic acid (PFOA)	NE	NE	ND	ND	ND	ND	0.353	0.419	ND	ND	ND
Perfluorooctanesulfonic acid (PFOS)	NE	NE	1.19	ND	4.18	7.07	32.8	32.7	16.3	0.589	2.83
Perfluoropentanoic acid (PFPeA)	NE	NE	ND	ND	ND	0.231 J	ND	ND	ND	0.136 J	ND
Perfluoro-1-heptanesulfonic acid (PFHpS)	NE	NE	ND	ND	ND	ND	0.461	0.49	ND	ND	ND
Perfluoro-n-butanoic acid (PFBA)	NE	NE	ND	ND	ND	0.267 J	ND	ND	ND	ND	ND
Perfluoro-1-pentanesulfonate (PFPeS)	NE	NE	ND	ND	ND	ND	0.356	0.379	ND	ND	ND
CT Sum of 5 (PFOA, PFOS, PFNA, PFHxS, PFHpA)	14	1350	1.2833	ND	4.532	7.685	37.583	38.219	ND	ND	ND

Only detections above laboratory reporting limits listed

NE = Not Established

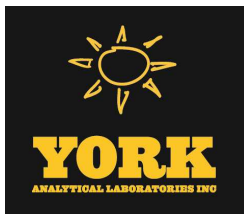
J = Estimated Value

RES DEC = Residential Direct Exposure Criteria

GB PMC = GB Pollutant Mobility Criteria

Bold = Exceeds Res DEC

Shaded = Exceeds GB PMC



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 03/21/2024

Client Project ID: 43340 Hempstead Park
York Project (SDG) No.: 24A1057

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 03/21/2024
Client Project ID: 43340 Hempstead Park
York Project (SDG) No.: 24A1057

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on January 18, 2024 and listed below. The project was identified as your project: **43340 Hempstead Park**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24A1057-01	MW-1R	Ground Water	01/17/2024	01/18/2024
24A1057-02	MW-3	Ground Water	01/17/2024	01/18/2024
24A1057-03	MW-6	Ground Water	01/17/2024	01/18/2024
24A1057-04	DUP	Ground Water	01/17/2024	01/18/2024
24A1057-05	Trip Blank	Water	01/17/2024	01/18/2024

General Notes for York Project (SDG) No.: 24A1057

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

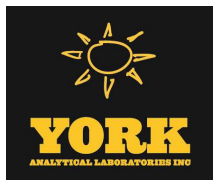
Approved By:



Date: 03/21/2024

Cassie L Mosher
Laboratory Manager





Sample Information

Client Sample ID: MW-1R

York Sample ID: 24A1057-01

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 2:00 pm

Date Received

01/18/2024

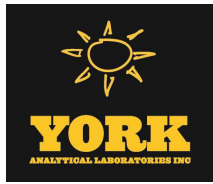
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
67-64-1	Acetone	ND	QL-02, ICVE	ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24A1057-01

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 2:00 pm

Date Received

01/18/2024

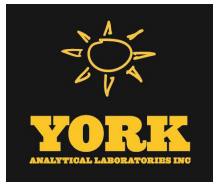
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
67-66-3	Chloroform	1.91		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
127-18-4	Tetrachloroethylene	ND	QL-02, CCVE, ICVE	ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:18	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	112 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	106 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	94.4 %	70-130							



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24A1057-01

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 2:00 pm

Date Received

01/18/2024

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.88	1	EPA 8270D	01/20/2024 07:16	01/21/2024 16:58	KH
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	63.7 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	69.9 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	66.0 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
120-12-7	Anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
218-01-9	Chrysene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
206-44-0	Fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
86-73-7	Fluorene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
91-20-3	Naphthalene	0.0588		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
85-01-8	Phenanthrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH
129-00-0	Pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 13:55	KH

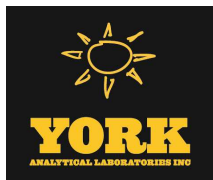
Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	01/22/2024 08:41	01/23/2024 13:32	KH
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	Surrogate: 1,4-Dioxane-d8	66.6 %			36.6-118					



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24A1057-01

York Project (SDG) No.

Client Project ID

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24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 2:00 pm

01/18/2024

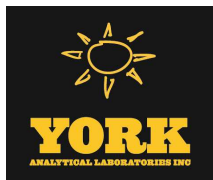
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	22.1		ng/L	1.82	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	9.12		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.84		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	60.8		ng/L	1.89	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	14.4		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.31		ng/L	1.92	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	1.57	J	ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	9.24		ng/L	4.12	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	2.57		ng/L	1.97	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.99	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.83	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.91	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	0.368	J	ng/L	8.24	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.67	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	4.12	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	4.12	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	4.12	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	15.2		ng/L	1.94	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.73	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	8.24	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.79	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.71	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
919005-14-4	ADONA	ND		ng/L	7.79	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	2.00	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	5.15	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24A1057-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 2:00 pm

01/18/2024

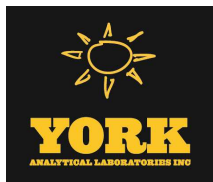
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	25.8	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	25.8	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	20.6	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	20.6	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	2.06	1	EPA 1633 Draft 3	02/10/2024 15:28	02/12/2024 15:52	ESJ
Surrogate Recoveries		Result		Acceptance Range						
Surrogate: M3PFBS		125 %		25-150						
Surrogate: M5PFHxA		137 %		25-150						
Surrogate: M4PFHpA		120 %		25-150						
Surrogate: M3PFHxS		130 %		25-150						
Surrogate: Perfluoro-n-[13C8]octanoic acid		127 %		25-150						
Surrogate: M6PFDA		117 %		25-150						
Surrogate: M7PFUdA		127 %		25-150						
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		92.0 %		25-150						
Surrogate: M2PFTeDA		70.9 %		10-150						
Surrogate: Perfluoro-n-[13C4]butanoic acid		4.24 %	PFSu-L	25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfoni		130 %		25-150						
Surrogate: Perfluoro-n-[13C5]pentanoic aci		139 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfon		123 %		10-150						
Surrogate: d3-N-MeFOSAA		86.8 %		25-150						
Surrogate: d5-N-EtFOSAA		94.1 %		25-150						
Surrogate: M2-6:2 FTS		115 %		25-200						
Surrogate: M2-8:2 FTS		96.7 %		25-200						
Surrogate: M9PFNA		131 %		25-150						
Surrogate: M2-4:2 FTS		115 %		25-150						
Surrogate: d-N-MeFOSA		109 %		25-150						
Surrogate: d-N-EtFOSA		88.7 %		25-150						
Surrogate: M3HFPO-DA		162 %	PFSu-H	25-150						
Surrogate: d9-N-EtFOSE		89.1 %		25-150						
Surrogate: d7-N-MeFOSE		93.8 %		25-150						



Sample Information

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24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 2:00 pm

01/18/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.191		mg/L	0.150	1	CT DEP ETPH	01/19/2024 13:18	01/20/2024 11:33	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	60.3 %			30-140					

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-39-3	Barium	0.117		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-43-9	Cadmium	ND		mg/L	0.000556	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-47-3	Chromium	0.00791		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-50-8	Copper	0.00124		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-02-0	Nickel	0.00231		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7782-49-2	Selenium	0.00492		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw
7440-66-6	Zinc	0.152		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:19	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	01/19/2024 08:36	01/19/2024 08:36	PFA

Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

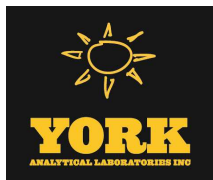
24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 3:10 pm

01/18/2024



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 3:10 pm

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VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
67-64-1	Acetone	ND	ICVE, QL-02	ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

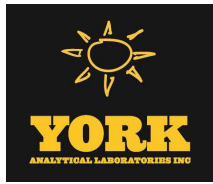
RICHMOND HILL, NY 11418

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(203) 325-1371

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ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 3:10 pm

Date Received

01/18/2024

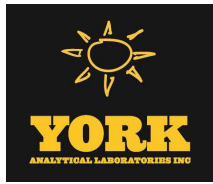
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
127-18-4	Tetrachloroethylene	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:47	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	114 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	105 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	93.8 %	70-130							



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 3:10 pm

Date Received

01/18/2024

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.88	1	EPA 8270D	01/20/2024 07:16	01/21/2024 17:27	KH
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	62.2 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	72.5 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	66.4 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
120-12-7	Anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
218-01-9	Chrysene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
206-44-0	Fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
86-73-7	Fluorene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
91-20-3	Naphthalene	0.0588		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
85-01-8	Phenanthrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH
129-00-0	Pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:26	KH

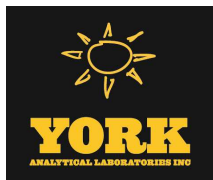
Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	01/22/2024 08:41	01/23/2024 13:49	KH
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	Surrogate: 1,4-Dioxane-d8	64.0 %			36.6-118					



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 3:10 pm

01/18/2024

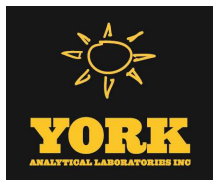
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	93.3		ng/L	1.76	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	78.0		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	16.7		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1370		ng/L	18.2	10	EPA 1633 Draft 3	02/03/2024 11:39	02/06/2024 16:45	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	35.8		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3040		ng/L	18.5	10	EPA 1633 Draft 3	02/03/2024 11:39	02/06/2024 16:45	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	5.29		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	33.1		ng/L	3.97	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	122		ng/L	1.90	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	7.12	J	ng/L	7.54	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.62	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	15.4		ng/L	7.94	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.53	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.97	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.97	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.97	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	293		ng/L	1.87	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.44	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.94	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.50	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.42	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
919005-14-4	ADONA	ND		ng/L	7.50	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.93	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	7.20		ng/L	1.91	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.96	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 3:10 pm

01/18/2024

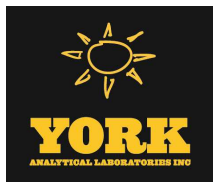
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	24.8	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	24.8	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	19.8	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	19.8	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.98	1	EPA 1633 Draft 3	02/03/2024 11:39	02/05/2024 18:51	ESJ
Surrogate Recoveries		Result		Acceptance Range						
Surrogate: M3PFBS		133 %			25-150					
Surrogate: M3PFBS		156 %	PFSu-H		25-150					
Surrogate: M5PFHxA		108 %			25-150					
Surrogate: M5PFHxA		107 %			25-150					
Surrogate: M4PFHpA		113 %			25-150					
Surrogate: M4PFHpA		97.3 %			25-150					
Surrogate: M3PFHxS		121 %			25-150					
Surrogate: M3PFHxS		96.7 %			25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid		132 %			25-150					
Surrogate: Perfluoro-n-[13C8]octanoic acid		104 %			25-150					
Surrogate: M6PFDA		117 %			25-150					
Surrogate: M6PFDA		91.6 %			25-150					
Surrogate: M7PFUdA		88.9 %			25-150					
Surrogate: M7PFUdA		88.5 %			25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		67.0 %			25-150					
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		83.7 %			25-150					
Surrogate: M2PFTeDA		62.9 %			10-150					
Surrogate: M2PFTeDA		53.4 %			10-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid		12.9 %	PFSu-L		25-150					
Surrogate: Perfluoro-n-[13C4]butanoic acid		7.51 %	PFSu-L		25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfoni		119 %			25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfoni		107 %			25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic aci		114 %			25-150					
Surrogate: Perfluoro-n-[13C5]pentanoic aci		105 %			25-150					
Surrogate: Perfluoro-1-[13C8]octanesulfon		122 %			10-150					
Surrogate: Perfluoro-1-[13C8]octanesulfon		160 %	PFSu-H		10-150					
Surrogate: d3-N-MeFOSAA		70.7 %			25-150					
Surrogate: d3-N-MeFOSAA		101 %			25-150					
Surrogate: d5-N-EtFOSAA		67.6 %			25-150					
Surrogate: d5-N-EtFOSAA		113 %			25-150					
Surrogate: M2-6:2 FTS		139 %			25-200					



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 3:10 pm

Date Received

01/18/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M2-6:2 FTS	106 %			25-200					
	Surrogate: M2-8:2 FTS	85.8 %			25-200					
	Surrogate: M2-8:2 FTS	84.8 %			25-200					
	Surrogate: M9PFNA	108 %			25-150					
	Surrogate: M9PFNA	107 %			25-150					
	Surrogate: M2-4:2 FTS	140 %			25-150					
	Surrogate: M2-4:2 FTS	126 %			25-150					
	Surrogate: d-N-MeFOSA	66.4 %			25-150					
	Surrogate: d-N-MeFOSA	93.2 %			25-150					
	Surrogate: d-N-EtFOSA	48.3 %			25-150					
	Surrogate: d-N-EtFOSA	89.8 %			25-150					
	Surrogate: M3HFPO-DA	123 %			25-150					
	Surrogate: M3HFPO-DA	120 %			25-150					
	Surrogate: d9-N-EtFOSE	46.5 %			25-150					
	Surrogate: d9-N-EtFOSE	75.6 %			25-150					
	Surrogate: d7-N-MeFOSE	52.4 %			25-150					
	Surrogate: d7-N-MeFOSE	86.2 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.191		mg/L	0.150	1	CT DEP ETPH	01/19/2024 13:18	01/20/2024 12:12	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	53.0 %			30-140					

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-39-3	Barium	0.0713		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-43-9	Cadmium	ND		mg/L	0.000556	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-47-3	Chromium	0.00813		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-50-8	Copper	0.00360		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-02-0	Nickel	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

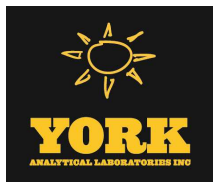
RICHMOND HILL, NY 11418

www.YORKLAB.com

(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-3

York Sample ID: 24A1057-02

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 3:10 pm

Date Received

01/18/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7782-49-2	Selenium	0.00122		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw
7440-66-6	Zinc	0.0687		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:23	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	01/19/2024 08:36	01/19/2024 08:36	PFA

Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

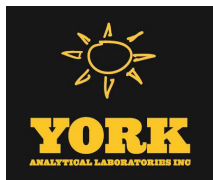
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA



Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 12:10 pm

01/18/2024

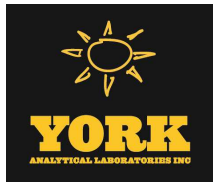
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
67-64-1	Acetone	ND	ICVE, QL-02	ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA



Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
127-18-4	Tetrachloroethylene	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:15	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	114 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	106 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	93.3 %	70-130							

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.88	1	EPA 8270D	01/20/2024 07:16	01/21/2024 17:56	KH
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	66.0 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	76.4 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	82.3 %	30-130							

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
120-12-7	Anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

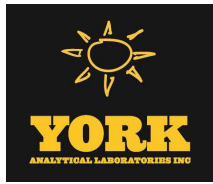
RICHMOND HILL, NY 11418

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(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
218-01-9	Chrysene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
206-44-0	Fluoranthene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
86-73-7	Fluorene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
91-20-3	Naphthalene	0.435		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
85-01-8	Phenanthrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH
129-00-0	Pyrene	ND		ug/L	0.0588	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 14:57	KH

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	01/22/2024 08:41	01/23/2024 14:23	KH
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	<i>Surrogate: 1,4-Dioxane-d8</i>	<i>57.3 %</i>			<i>36.6-118</i>					

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.87		ng/L	1.76	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	5.33		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.18		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.45		ng/L	1.82	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	13.1		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	30.4		ng/L	1.85	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	0.877	J	ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTriDA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.605	J	ng/L	3.98	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

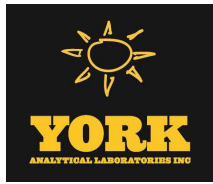
RICHMOND HILL, NY 11418

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(203) 325-1371

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Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

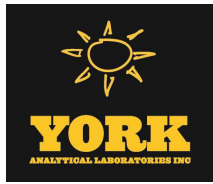
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.90	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.92	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.57	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.64	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
375-22-4	Perfluoro-n-butyric acid (PFBA)	ND		ng/L	7.96	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.54	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.98	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.98	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	0.372	J	ng/L	3.98	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ng/L	1.87	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.47	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.96	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.53	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.45	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
919005-14-4	ADONA	ND		ng/L	7.53	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.93	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.91	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.98	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	24.9	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	24.9	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	19.9	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	19.9	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.99	1	EPA 1633 Draft 3	01/19/2024 14:51	01/20/2024 00:21	ESJ
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		25.2 %	25-150							
Surrogate: M5PFHxA		26.6 %	25-150							
Surrogate: M4PFHpA		50.3 %	25-150							
Surrogate: M3PFHxS		98.6 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		85.7 %	25-150							
Surrogate: M6PFDA		117 %	25-150							



Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M7PFUdA	97.9 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	85.6 %			25-150					
	Surrogate: M2PFTeDA	64.2 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid	1.33 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	119 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid	2.99 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	96.0 %			10-150					
	Surrogate: d3-N-MeFOSAA	85.2 %			25-150					
	Surrogate: d5-N-EtFOSAA	86.6 %			25-150					
	Surrogate: M2-6:2 FTS	100 %			25-200					
	Surrogate: M2-8:2 FTS	112 %			25-200					
	Surrogate: M9PFNA	90.4 %			25-150					
	Surrogate: M2-4:2 FTS	37.8 %			25-150					
	Surrogate: d-N-MeFOSA	73.9 %			25-150					
	Surrogate: d-N-EtFOSA	57.5 %			25-150					
	Surrogate: M3HFPO-DA	23.6 %	PFSu-L		25-150					
	Surrogate: d9-N-EtFOSE	37.4 %			25-150					
	Surrogate: d7-N-MeFOSE	53.7 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.323		mg/L	0.150	1	CT DEP ETPH	01/19/2024 13:18	01/20/2024 12:50	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	65.6 %			30-140					

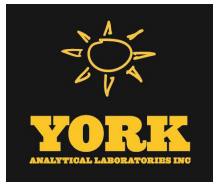
Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-39-3	Barium	0.0211		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-43-9	Cadmium	ND		mg/L	0.000556	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-47-3	Chromium	0.00806		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-50-8	Copper	0.00260		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw



Sample Information

Client Sample ID: MW-6

York Sample ID: 24A1057-03

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 12:10 pm

Date Received

01/18/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-02-0	Nickel	0.00169		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7782-49-2	Selenium	0.00526		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw
7440-66-6	Zinc	0.0195		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:26	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	01/19/2024 08:36	01/19/2024 08:36	PFA

Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 5:00 pm

Date Received

01/18/2024

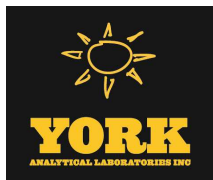
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 5:00 pm

01/18/2024

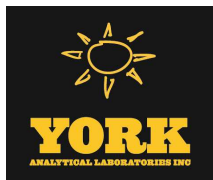
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
67-64-1	Acetone	ND	ICVE, QL-02	ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Ground Water

January 17, 2024 5:00 pm

01/18/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
127-18-4	Tetrachloroethylene	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 17:44	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	113 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	105 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	92.8 %	70-130							

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.56	1	EPA 8270D	01/20/2024 07:16	01/21/2024 18:24	KH
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	69.3 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	80.0 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	83.8 %	30-130							

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
208-96-8	Acenaphthylene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

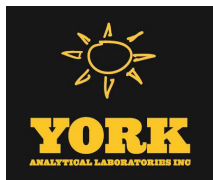
RICHMOND HILL, NY 11418

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(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.
24A1057

Client Project ID
43340 Hempstead Park

Matrix
Ground Water

Collection Date/Time
January 17, 2024 5:00 pm

Date Received
01/18/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
218-01-9	Chrysene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
206-44-0	Fluoranthene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
86-73-7	Fluorene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
91-20-3	Naphthalene	0.422		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
85-01-8	Phenanthrene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH
129-00-0	Pyrene	ND		ug/L	0.0556	1	EPA 8270D SIM	01/20/2024 07:16	01/22/2024 15:27	KH

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	01/22/2024 08:41	01/23/2024 14:40	KH
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	<i>Surrogate: 1,4-Dioxane-d8</i>	<i>57.2 %</i>			<i>36.6-118</i>					

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	7.23		ng/L	1.88	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	4.94		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.01		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	3.48		ng/L	1.94	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	14.0		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	24.3		ng/L	1.97	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ

120 RESEARCH DRIVE

STRATFORD, CT 06615

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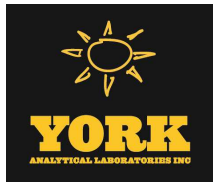
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 5:00 pm

Date Received

01/18/2024

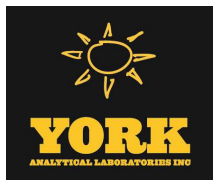
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2991-50-6	N-EtFOSAA	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	5.31		ng/L	4.24	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	2.02	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.04	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	8.05	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	8.14	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	11.5		ng/L	8.48	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		ng/L	3.77	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	4.24	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	4.24	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	4.24	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	1.03	J	ng/L	1.99	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.95	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	8.48	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	8.01	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.92	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
919005-14-4	ADONA	ND		ng/L	8.01	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	2.06	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	2.03	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND	PF-LCS- L	ng/L	5.30	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	26.5	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	26.5	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	21.2	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	21.2	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	2.12	1	EPA 1633 Draft 3	01/27/2024 16:01	01/29/2024 18:21	ESJ
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		104 %	25-150							
Surrogate: M5PFHxA		128 %	25-150							
Surrogate: M4PFHpA		107 %	25-150							
Surrogate: M3PFHxS		108 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		102 %	25-150							



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 5:00 pm

Date Received

01/18/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M6PFDA	99.9 %			25-150					
	Surrogate: M7PFUdA	71.1 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	46.0 %			25-150					
	Surrogate: M2PFTeDA	22.9 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid	15.0 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	104 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid	128 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	103 %			10-150					
	Surrogate: d3-N-MeFOSAA	59.3 %			25-150					
	Surrogate: d5-N-EtFOSAA	53.0 %			25-150					
	Surrogate: M2-6:2 FTS	115 %			25-200					
	Surrogate: M2-8:2 FTS	81.3 %			25-200					
	Surrogate: M9PFNA	119 %			25-150					
	Surrogate: M2-4:2 FTS	131 %			25-150					
	Surrogate: d-N-MeFOSA	52.7 %			25-150					
	Surrogate: d-N-EtFOSA	56.1 %			25-150					
	Surrogate: M3HFPO-DA	126 %			25-150					
	Surrogate: d9-N-EtFOSE	9.70 %	PFSu-L		25-150					
	Surrogate: d7-N-MeFOSE	19.1 %	PFSu-L		25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.247		mg/L	0.150	1	CT DEP ETPH	01/19/2024 13:18	01/20/2024 13:28	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	59.6 %			30-140					

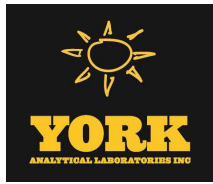
Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-39-3	Barium	0.0211		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-43-9	Cadmium	ND		mg/L	0.000556	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-47-3	Chromium	0.00875		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw



Sample Information

Client Sample ID: DUP

York Sample ID: 24A1057-04

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Ground Water

Collection Date/Time

January 17, 2024 5:00 pm

Date Received

01/18/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	Copper	0.00262		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-02-0	Nickel	0.00194		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7782-49-2	Selenium	0.00454		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw
7440-66-6	Zinc	0.0207		mg/L	0.00111	1	EPA 6020B	01/24/2024 08:27	01/25/2024 14:30	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	01/19/2024 08:36	01/19/2024 08:36	PFA

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24A1057-05

York Project (SDG) No.

24A1057

Client Project ID

43340 Hempstead Park

Matrix

Water

Collection Date/Time

January 17, 2024 5:00 pm

Date Received

01/18/2024

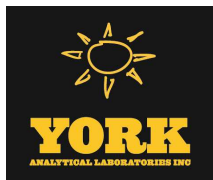
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24A1057-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24A1057

43340 Hempstead Park

Water

January 17, 2024 5:00 pm

01/18/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
78-93-3	2-Butanone	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
67-64-1	Acetone	ND	ICVE	ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

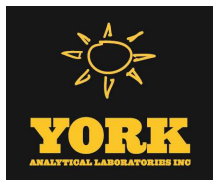
RICHMOND HILL, NY 11418

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FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24A1057-05

York Project (SDG) No.
24A1057

Client Project ID
43340 Hempstead Park

Matrix
Water

Collection Date/Time
January 17, 2024 5:00 pm

Date Received
01/18/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	01/24/2024 09:00	01/24/2024 16:07	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	111 %	70-130							
2037-26-5	Surrogate: SURRE: Toluene-d8	87.9 %	70-130							
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	102 %	70-130							



REASONABLE CONFIDENCE PROTOCOL

LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc. - Strat Client: VHB
Project Location: 43340 Hempstead Park Lab Project No.: 24A1057
Laboratory Sample ID(s): 24A1057-01 - 24A1057-05 Sampling Date(s): 01/17/2024 - 01/17/2024
RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature ($\leq$ or $= 6^{\circ}\text{C}$)?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	NO
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized
Signature:

Position: Laboratory Manager

Printed Name: Cassie L. Mosher

Date: 03/21/2024





York Narrative- CTDEEP RCP Introduction

This Work Order Narrative includes the following items for full review of any quality issues encountered with samples and their analyses for the parameters requested:

1. Sample Receipt Information, including a Sample Summary which cross references your sample ID with York Analytical sample ID, identifying the matrix and Date/Time collected and received at York.
2. Analysis Methodologies employed for the work order
3. Any Sample Issues encountered such as Holding time exceedances, improper containers/preservation, or any related issue with sample integrity
4. Specific Analysis Findings in order: Volatiles, Semi-Volatiles, Pesticides/PCBs, Herbicides, other GC parameters, Metals, Mercury, Wet Chemistry.
5. Analysis Findings Include:
 - BIAS Summary Report-Multiple Lines of Evidence
 - Analyte qualifier summary
 - Samples and associated Calibration Curve(s)
 - Calibration Outliers Discussion/Tabular presentation and affected samples
 - Initial Calibration Verification (ICV) information
 - Batch QC Sample Performance (Blanks, Blank Spikes (BS), MS/MSD)
 - Internal Standard Performance
 - Surrogate Performance
 - Example Calculations

Work Order Narrative

York Analytical Work Order No.: 24A1057

Client : VHB

Client Project ID : 43340 Hempstead Park

Prepared for : Pamela Lind

1.0) Introduction

This work order Narrative applies to the following samples submitted to our laboratory on: 01/18/2024 2:00 PM

5 sample(s) were received intact in a custody-sealed cooler(s) unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ($\leq 6^{\circ}\text{C}$) and documented as: {3.9}°C

Sample Summary

<u>SampleName</u>	<u>Lab Number</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
MW-1R	24A1057-01	Water	01/17/2024 2:00 PM	01/18/2024 2:00 PM
MW-3	24A1057-02	Water	01/17/2024 3:10 PM	01/18/2024 2:00 PM
MW-6	24A1057-03	Water	01/17/2024 12:10 PM	01/18/2024 2:00 PM
DUP	24A1057-04	Water	01/17/2024 5:00 PM	01/18/2024 2:00 PM
Trip Blank	24A1057-05	Water	01/17/2024 5:00 PM	01/18/2024 2:00 PM

WorkOrder Comments

1,4-Dioxane was activated for samples -1 through -4 on 1/19/24. Additionally, PFAS was activated on -3.

York Analytical Work Order Narrative

2.0 Methodology

<u>Analysis Class</u>	<u>Preparation Method</u>	<u>Analysis Methodology</u>
VOA	EPA 5030B	EPA 8260C
SVOA	EPA 3510C	EPA 8270D
SVOA	EPA 3510C	EPA 8270D SIM
SVOA	EPA 3535A	EPA 8270E SIM
PFAS	EPA 1633 Prep	EPA 1633 Draft 3
GC	EPA 3545A	CT DEP ETPH
GC	EPA SW846-3510C Low Level	CT DEP ETPH
METALS	EPA 3015A	EPA 6020B
HG	EPA SW846-7470A	EPA 7470

Methodology Comments

The following CT RCP list of compound Reporting Limits do not meet the current action levels for Volatiles defined in the State of Connecticut Remedial Standard Regulations (RSR) as amended June 27, 2013 for groundwater protection criteria (GWPC) due to method limitations: Ethylene Dibromide (EDB). If EDB is required to meet GWPC, the LEP must request EPA SW 846 method 8011.

Analyte List

<u>Method</u>	<u>Analyte</u>
CT DEP ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)
EPA 1633 Draft 3	11CL-PF3OUdS ; 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) ; 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) ; 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) ; 3-Perfluoroheptyl propanoic acid (FHpPA) ; 3-Perfluoropentyl propanoic acid (FPePA) ; 3-Perfluoropropyl propanoic acid (FPrPA) ; 9CL-PF3ONS ; ADONA ; HFPO-DA (Gen-X) ; N-EtFOSA ; N-EtFOSAA ; N-EtFOSE ; N-MeFOSA ; N-MeFOSAA ; N-MeFOSE ; Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) ; Perfluoro-1-decanesulfonic acid (PFDS) ; Perfluoro-1-heptanesulfonic acid (PFHpS) ; Perfluoro-1-nonanesulfonic acid (PFNS) ; Perfluoro-1-octanesulfonamide (FOSA) ; Perfluoro-1-pentanesulfonate (PFPeS) ; Perfluoro-3,6-dioxaheptanoic acid (NFDHA) ; Perfluoro-4-oxapentanoic acid (PFMPA) ; Perfluoro-5-oxahexanoic acid (PFMBA) ; Perfluorobutanesulfonic acid (PFBS) ; Perfluorodecanoic acid (PFDA) ; Perfluorododecanesulfonic acid (PFDoS) ; Perfluorododecanoic acid (PFDoA) ; Perfluoroheptanoic acid (PFHpA) ; Perfluorohexanesulfonic acid (PFHxS) ; Perfluorohexanoic acid (PFHxA) ; Perfluoro-n-butanoic acid (PFBA) ; Perfluorononanoic acid (PFNA) ; Perfluorooctanesulfonic acid (PFOS) ; Perfluorooctanoic acid (PFOA) ; Perfluoropentanoic acid (PFPeA) ; Perfluorotetradecanoic acid (PFTA) ; Perfluorotridecanoic acid (PFTrDA) ; Perfluoroundecanoic acid (PFUnA)
EPA 6020B	Antimony ; Arsenic ; Barium ; Beryllium ; Cadmium ; Chromium ; Copper ; Lead ; Nickel ; Selenium ; Silver ; Thallium ; Vanadium ; Zinc
EPA 7470	Mercury
EPA 8260C	1,1,1,2-Tetrachloroethane ; 1,1,1-Trichloroethane ; 1,1,2,2-Tetrachloroethane ; 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) ; 1,1,2-Trichloroethane ; 1,1-Dichloroethane ; 1,1-Dichloroethylene ; 1,1-Dichloropropylene ; 1,2,3-Trichlorobenzene ; 1,2,3-Trichloropropane ; 1,2,4-Trichlorobenzene ; 1,2,4-Trimethylbenzene ; 1,2-Dibromo-3-chloropropane ; 1,2-Dibromoethane ; 1,2-Dichlorobenzene ; 1,2-Dichloroethane ; 1,2-Dichloropropane ; 1,3,5-Trimethylbenzene ; 1,3-Dichlorobenzene ; 1,3-Dichloropropane ; 1,4-Dichlorobenzene ; 2,2-Dichloropropane ; 2-Butanone ; 2-Chlorotoluene ; 2-Hexanone ; 4-Chlorotoluene ; 4-Methyl-2-pentanone ; Acetone ; Acrylonitrile ; Benzene ; Bromobenzene ; Bromochloromethane ; Bromodichloromethane ; Bromoform ; Bromomethane ; Carbon disulfide ; Carbon tetrachloride ; Chlorobenzene ; Chloroethane ; Chloroform ; Chloromethane ; cis-1,2-Dichloroethylene ; cis-1,3-Dichloropropylene ; Dibromochloromethane ; Dibromomethane ; Dichlorodifluoromethane ; Ethyl Benzene ; Hexachlorobutadiene ; Isopropylbenzene ; Methyl Methacrylate ; Methyl tert-butyl ether (MTBE) ; Methylene chloride ; Naphthalene ; n-Butylbenzene ; n-Propylbenzene ; o-Xylene ; p- & m-Xylenes ; p-Isopropyltoluene ; sec-Butylbenzene ; Styrene ; tert-Butylbenzene ; Tetrachloroethylene ; Tetrahydrofuran ; Toluene ; trans-1,2-Dichloroethylene ; trans-1,3-Dichloropropylene ; trans-1,4-dichloro-2-butene ; Trichloroethylene ; Trichlorofluoromethane ; Vinyl Chloride
EPA 8270D	2-Methylnaphthalene
EPA 8270D SIM	Acenaphthene ; Acenaphthylene ; Anthracene ; Benzo(a)anthracene ; Benzo(a)pyrene ; Benzo(b)fluoranthene ; Benzo(g,h,i)perylene ; Benzo(k)fluoranthene ; Chrysene ; Dibenzo(a,h)anthracene ; Fluoranthene ; Fluorene ; Indeno(1,2,3-cd)pyrene ; Naphthalene ; Phenanthrene ; Pyrene
EPA 8270E SIM	1,4-Dioxane

York Analytical Work Order Narrative

3.0 Sample Issues

No issues were encountered with the samples submitted other than those detailed below.

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
METALS	24A1057-01	MW-1R	Antimony		high				
METALS	24A1057-01	MW-1R	Thallium		high				
METALS	24A1057-02	MW-3	Antimony		high				
METALS	24A1057-02	MW-3	Thallium		high				
METALS	24A1057-03	MW-6	Antimony		high				
METALS	24A1057-03	MW-6	Thallium		high				
METALS	24A1057-04	DUP	Antimony		high				
METALS	24A1057-04	DUP	Thallium		high				

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24A1057-01	MW-1R	Acetone	Low		Low			
VOA	24A1057-01	MW-1R	Tetrachloroethylene	Low	Low	Low			
VOA	24A1057-02	MW-3	Acetone	Low		Low			
VOA	24A1057-02	MW-3	Tetrachloroethylene	Low	Low	Low			
VOA	24A1057-03	MW-6	Acetone	Low		Low			
VOA	24A1057-03	MW-6	Tetrachloroethylene	Low	Low	Low			
VOA	24A1057-04	DUP	Acetone	Low		Low			
VOA	24A1057-04	DUP	Tetrachloroethylene	Low	Low	Low			
VOA	24A1057-05	Trip Blank	Acetone	Low	high				
VOA	24A1057-05	Trip Blank	Acrylonitrile		high	high			
VOA	24A1057-05	Trip Blank	Tetrachloroethylene	Low		Low			

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
MW-1R	EPA 1633 Draft 3	24A1057-01	Water	M3HFPO-DA	PFSu-H
MW-1R	EPA 1633 Draft 3	24A1057-01	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
MW-1R	EPA 1633 Draft 3	24A1057-01	Water	Perfluoro-n-butanoic acid (PFBA)	J
MW-1R	EPA 1633 Draft 3	24A1057-01	Water	Perfluorononanoic acid (PFNA)	J
MW-3	EPA 1633 Draft 3	24A1057-02	Water	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	J
MW-3	EPA 1633 Draft 3	24A1057-02	Water	M3PFBS	PFSu-H
MW-3	EPA 1633 Draft 3	24A1057-02	Water	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	PFSu-H
MW-3	EPA 1633 Draft 3	24A1057-02	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	24A1057-02RE1	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
MW-6	EPA 1633 Draft 3	24A1057-03	Water	M3HFPO-DA	PFSu-L
MW-6	EPA 1633 Draft 3	24A1057-03	Water	Perfluoro-5-oxahexanoic acid (PFMBA)	J
MW-6	EPA 1633 Draft 3	24A1057-03	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
MW-6	EPA 1633 Draft 3	24A1057-03	Water	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	PFSu-L
MW-6	EPA 1633 Draft 3	24A1057-03	Water	Perfluorononanoic acid (PFNA)	J
MW-6	EPA 1633 Draft 3	24A1057-03	Water	Perfluoropentanoic acid (PFPeA)	J
DUP	EPA 1633 Draft 3	24A1057-04	Water	3-Perfluoropropyl propanoic acid (FPrPA)	PF-LCS-L
DUP	EPA 1633 Draft 3	24A1057-04	Water	d7-N-MeFOSE	PFSu-L
DUP	EPA 1633 Draft 3	24A1057-04	Water	d9-N-EtFOSE	PFSu-L
DUP	EPA 1633 Draft 3	24A1057-04	Water	Perfluoro-1-pentanesulfonate (PFPeS)	J
DUP	EPA 1633 Draft 3	24A1057-04	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
DUP	EPA 1633 Draft 3	24A1057-04	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	BA41229-BS2	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	BA41789-BLK1	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	BA41789-BLK1	Water	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	PFSu-L

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	BA41789-BLK1	Water	Perfluoropentanoic acid (PFPeA)	J
	EPA 1633 Draft 3	BA41789-BS2	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	BA41789-DUP1	Water	N-EtFOSE	J
	EPA 1633 Draft 3	BA41789-DUP1	Water	N-MeFOSE	J
	EPA 1633 Draft 3	BA41789-DUP1	Water	Perfluoro-1-pentanesulfonate (PFPeS)	J
	EPA 1633 Draft 3	BA41789-DUP1	Water	Perfluorononanoic acid (PFNA)	J
	EPA 1633 Draft 3	BA41789-DUP1	Water	Perfluorotridecanoic acid (PFTrDA)	J
	EPA 1633 Draft 3	BB40180-BS2	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
MW-1R	EPA 8260C	24A1057-01	Water	Acetone	QL-02
MW-1R	EPA 8260C	24A1057-01	Water	Acetone	ICVE
MW-1R	EPA 8260C	24A1057-01	Water	Tetrachloroethylene	CCVE
MW-1R	EPA 8260C	24A1057-01	Water	Tetrachloroethylene	ICVE
MW-1R	EPA 8260C	24A1057-01	Water	Tetrachloroethylene	QL-02
MW-3	EPA 8260C	24A1057-02	Water	Acetone	QL-02
MW-3	EPA 8260C	24A1057-02	Water	Acetone	ICVE
MW-3	EPA 8260C	24A1057-02	Water	Tetrachloroethylene	QL-02
MW-3	EPA 8260C	24A1057-02	Water	Tetrachloroethylene	CCVE
MW-3	EPA 8260C	24A1057-02	Water	Tetrachloroethylene	ICVE
MW-6	EPA 8260C	24A1057-03	Water	Acetone	QL-02
MW-6	EPA 8260C	24A1057-03	Water	Acetone	ICVE
MW-6	EPA 8260C	24A1057-03	Water	Tetrachloroethylene	QL-02
MW-6	EPA 8260C	24A1057-03	Water	Tetrachloroethylene	CCVE
MW-6	EPA 8260C	24A1057-03	Water	Tetrachloroethylene	ICVE
DUP	EPA 8260C	24A1057-04	Water	Acetone	ICVE
DUP	EPA 8260C	24A1057-04	Water	Acetone	QL-02
DUP	EPA 8260C	24A1057-04	Water	Tetrachloroethylene	ICVE
DUP	EPA 8260C	24A1057-04	Water	Tetrachloroethylene	CCVE
DUP	EPA 8260C	24A1057-04	Water	Tetrachloroethylene	QL-02
Trip Blank	EPA 8260C	24A1057-05	Water	Acetone	ICVE
Trip Blank	EPA 8260C	24A1057-05	Water	Tetrachloroethylene	ICVE
Trip Blank	EPA 8260C	24A1057-05	Water	Tetrachloroethylene	QL-02
	EPA 8260C	S4A1504-SCV1	Water	Acetone	ICVE
	EPA 8260C	S4A1504-SCV1	Water	Acetone	ICVE20
	EPA 8260C	S4A1504-SCV1	Water	Tetrachloroethylene	ICVE
	EPA 8260C	S4A1504-SCV1	Water	Tetrachloroethylene	ICVE20
	EPA 8260C	S4A1727-SCV1	Water	Acetone	ICVE
	EPA 8260C	S4A1727-SCV1	Water	Tetrachloroethylene	ICVE

York Analytical Work Order Narrative

Qualifier Definitions :

CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP LOW MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40021

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40021	S4A1504	S4A1504	Secondary Cal Check	S4A1504-SCV1	VOA No. 8	V842496.D
SA40021	S4A2517	S4A2517	Calibration Check	S4A2517-CCV1	VOA No. 8	V842626.D
SA40021	BA41525	S4A2517	LCS	BA41525-BS1	VOA No. 8	V842627.D
SA40021	BA41525	S4A2517	LCS Dup	BA41525-BSD1	VOA No. 8	V842628.D
SA40021	BA41525	S4A2517	Blank	BA41525-BLK1	VOA No. 8	V842630.D
SA40021	BA41525	S4A2517	MW-1R	24A1057-01	VOA No. 8	V842639.D
SA40021	BA41525	S4A2517	MW-3	24A1057-02	VOA No. 8	V842640.D
SA40021	BA41525	S4A2517	MW-6	24A1057-03	VOA No. 8	V842641.D
SA40021	BA41525	S4A2517	DUP	24A1057-04	VOA No. 8	V842642.D

Initial calibration for EPA 8260C met method guidelines.

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SA40021	S4A1504-SCV1	Acetone	10.0	6.40	64.0	80 - 120
SA40021	S4A1504-SCV1	Tetrachloroethylene	10.0	5.43	54.3	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4A2517-CCV1	Calibration Check	V842626.D
BA41525-BS1	LCS	V842627.D
BA41525-BSD1	LCS Dup	V842628.D
BA41525-BLK1	Blank	V842630.D
24A1057-01	MW-1R	V842639.D
24A1057-02	MW-3	V842640.D
24A1057-03	MW-6	V842641.D
24A1057-04	DUP	V842642.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40021	S4A2517	S4A2517-CCV1	V842626.D	01/24/24 10:05

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SA40021	S4A2517-CCV1	Tetrachloroethylene	ug/L	6.49	10.0	64.9	70 130	V842626.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SA40021	S4A2517	BA41525-BS1	LCS		V842627.D
SA40021	S4A2517	BA41525-BSD1	LCS Dup		V842628.D
SA40021	S4A2517	BA41525-BLK1	Blank		V842630.D
SA40021	S4A2517	24A1057-01	MW-1R		V842639.D
SA40021	S4A2517	24A1057-02	MW-3		V842640.D
SA40021	S4A2517	24A1057-03	MW-6		V842641.D
SA40021	S4A2517	24A1057-04	DUP		V842642.D

York Analytical Work Order Narrative

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BA41525	S4A2517	VOA No. 8	BA41525-BLK1	V842630.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40021	4A2517	BA41525-BS1	LCS	V842627.D
SA40021	4A2517	BA41525-BSD1	LCS Dup	V842628.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4A2517	LCS	BA41525-BS1	Acetone		50.4		70 - 130	
S4A2517	LCS	BA41525-BS1	Tetrachloroethylene		58.4		70 - 130	
S4A2517	LCS Dup	BA41525-BSD1	Acetone	50.4	51.2	1.57	70 - 130	30
S4A2517	LCS Dup	BA41525-BSD1	Tetrachloroethylene	58.4	56.1	4.02	70 - 130	30

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BA41525	24A1057-01	MW-1R	
BA41525	24A1057-02	MW-3	
BA41525	24A1057-03	MW-6	
BA41525	24A1057-04	DUP	
BA41525	BA41525-BLK1	Blank	

EPA 8260C

Dilutions: No sample dilutions were required.

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP LOW MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40024

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40024	S4A1727	S4A1727	Secondary Cal Check	S4A1727-SCV1	MSVOA7	V748389.D
SA40024	S4A2420	S4A2420	Calibration Check	S4A2420-CCV1	MSVOA7	V748465.D
SA40024	BA41524	S4A2420	LCS	BA41524-BS1	MSVOA7	V748466.D
SA40024	BA41524	S4A2420	LCS Dup	BA41524-BSD1	MSVOA7	V748467.D
SA40024	BA41524	S4A2420	Blank	BA41524-BLK1	MSVOA7	V748469.D
SA40024	BA41524	S4A2420	Trip Blank	24A1057-05	MSVOA7	V748478.D

Initial calibration for EPA 8260C exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40024	MSVOA7	1/16/2024 12:31:25 PM	V748376.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
1,2-Dibromo-3-chloropropane	10.84	15	0.0472	0.05				Avg
Tetrahydrofuran		15	0.0469	0.05				QRO

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4A1727-SCV1		V748389.D
Calibration Check	S4A2420-CCV1		V748465.D
LCS	BA41524-BS1		V748466.D
LCS Dup	BA41524-BSD1		V748467.D
Blank	BA41524-BLK1		V748469.D
Trip Blank	24A1057-05		V748478.D

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SA40024	S4A1727-SCV1	Acetone	10.0	6.58	65.8	80 - 120
SA40024	S4A1727-SCV1	Tetrachloroethylene	10.0	7.80	78.0	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4A2420-CCV1	Calibration Check	V748465.D
BA41524-BS1	LCS	V748466.D
BA41524-BSD1	LCS Dup	V748467.D
BA41524-BLK1	Blank	V748469.D
24A1057-05	Trip Blank	V748478.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40024	S4A2420	S4A2420-CCV1	V748465.D	01/24/24 09:23

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SA40024	S4A2420-CCV1	Acetone	ug/L	13.7	10.0	137	70 130	V748465.D
SA40024	S4A2420-CCV1	Acrylonitrile	ug/L	13.1	10.0	131	70 130	V748465.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SA40024	S4A2420	BA41524-BS1	LCS		V748466.D
SA40024	S4A2420	BA41524-BSD1	LCS Dup		V748467.D

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BA41524	S4A2420	MSVOA7	BA41524-BLK1	V748469.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40024	4A2420	BA41524-BS1	LCS	V748466.D
SA40024	4A2420	BA41524-BSD1	LCS Dup	V748467.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4A2420	LCS Dup	BA41524-BSD1	Acrylonitrile	120	134	10.9	70 - 130	30
S4A2420	LCS Dup	BA41524-BSD1	Tetrachloroethylene	70.8	66.3	6.56	70 - 130	30

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BA41524	24A1057-05	Trip Blank	
BA41524	BA41524-BLK1	Blank	

York Analytical Work Order Narrative

EPA 8260C

Dilutions: No sample dilutions were required.

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D SIM SIM Analysis

SVOA, 8270 SIM RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SA40005**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40005	S4A0428	S4A0428	Secondary Cal Check	S4A0428-SCV1	BNA #5	SV5A613.D
SA40005	S4A2305	S4A2305	Calibration Check	S4A2305-CCV1	BNA #5	SV5A915.D
SA40005	BA41318	S4A2305	Blank	BA41318-BLK2	BNA #5	SV5A918.D
SA40005	BA41318	S4A2305	LCS	BA41318-BS2	BNA #5	SV5A919.D
SA40005	BA41318	S4A2305	MW-1R	24A1057-01	BNA #5	SV5A920.D
SA40005	BA41318	S4A2305	MW-3	24A1057-02	BNA #5	SV5A921.D
SA40005	BA41318	S4A2305	MW-6	24A1057-03	BNA #5	SV5A922.D
SA40005	BA41318	S4A2305	DUP	24A1057-04	BNA #5	SV5A923.D

Initial calibration for EPA 8270D SIM met method guidelines.

EPA 8270D SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D SIM

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40005	S4A2305	S4A2305-CCV1	SV5A915.D	01/22/24 11:21

The continuing calibration verification recovered within method limits.

EPA 8270D SIM SIM Analysis

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BA41318	S4A2305	BNA #5	BA41318-BLK2	SV5A918.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40005	4A2305	BA41318-BS2	LCS	SV5A919.D

York Analytical Work Order Narrative

EPA 8270D SIM

SIM Analysis

Dilutions: No sample dilutions were required.

EPA 8270D SIM

SIM Analysis

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D

SVOA, 8270 LOW RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SL30041

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SL30041	S3L1916	S3L1916	Secondary Cal Check	S3L1916-SCV2	MSBNA9	E90030104.D
SL30041	S4A2317	S4A2317	Calibration Check	S4A2317-CCV1	MSBNA9	E90030409.D
SL30041	BA41318	S4A2317	Blank	BA41318-BLK1	MSBNA9	E90030410.D
SL30041	BA41318	S4A2317	LCS	BA41318-BS1	MSBNA9	E90030411.D
SL30041	BA41318	S4A2317	LCS Dup	BA41318-BSD1	MSBNA9	E90030412.D
SL30041	BA41318	S4A2317	MW-1R	24A1057-01	MSBNA9	E90030413.D
SL30041	BA41318	S4A2317	MW-3	24A1057-02	MSBNA9	E90030414.D
SL30041	BA41318	S4A2317	MW-6	24A1057-03	MSBNA9	E90030415.D
SL30041	BA41318	S4A2317	DUP	24A1057-04	MSBNA9	E90030416.D

Initial calibration for EPA 8270D met method guidelines.

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SL30041	S4A2317	S4A2317-CCV1	E90030409.D	01/21/24 15:03

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BA41318	S4A2317	MSBNA9	BA41318-BLK1	E90030410.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SL30041	4A2317	BA41318-BS1	LCS	E90030411.D
SL30041	4A2317	BA41318-BSD1	LCS Dup	E90030412.D

EPA 8270D

Dilutions: No sample dilutions were required.

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

CT DEP ETPH

Extractable Total Petroleum Hydrocarbons (ETPH)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40030

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40030	S4A1907	S4A1907	Secondary Cal Check	S4A1907-SCV1	HP FID 3	G8009735.D
SA40030	S4A2407	S4A2407	Calibration Check	S4A2407-CCV1	HP FID 3	G8009755.D
SA40030	BA41291	S4A2407	Blank	BA41291-BLK1	HP FID 3	G8009756.D
SA40030	BA41291	S4A2407	LCS	BA41291-BS1	HP FID 3	G8009757.D
SA40030	BA41291	S4A2407	LCS Dup	BA41291-BSD1	HP FID 3	G8009758.D
SA40030	BA41291	S4A2407	MW-1R	24A1057-01	HP FID 3	G8009759.D
SA40030	BA41291	S4A2407	MW-3	24A1057-02	HP FID 3	G8009760.D
SA40030	BA41291	S4A2407	MW-6	24A1057-03	HP FID 3	G8009761.D
SA40030	BA41291	S4A2407	DUP	24A1057-04	HP FID 3	G8009762.D
SA40030	S4A2407	S4A2407	Calibration Check	S4A2407-CCV2	HP FID 3	G8009766.D

Initial calibration for CT DEP ETPH exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40030	HP FID 3	1/18/2024 7:03:11 AM	G8009725.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
ETPH (Extractable Total Petroleum Hydrocarbons)		15			0.93872	out		LRO

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4A1907-SCV1		G8009735.D
Calibration Check	S4A2407-CCV1		G8009755.D
Blank	BA41291-BLK1		G8009756.D
LCS	BA41291-BS1		G8009757.D
LCS Dup	BA41291-BSD1		G8009758.D
MW-1R	24A1057-01		G8009759.D
MW-3	24A1057-02		G8009760.D
MW-6	24A1057-03		G8009761.D
DUP	24A1057-04		G8009762.D
Calibration Check	S4A2407-CCV2		G8009766.D

York Analytical Work Order Narrative

CT DEP ETPH

Initial Calibration Verification-

The initial calibration verification for analytical method CT DEP ETPH

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40030	S4A2407	S4A2407-CCV1	G8009755.D	01/20/24 09:00
SA40030	S4A2407	S4A2407-CCV2	G8009766.D	01/20/24 16:01

The continuing calibration verification recovered within method limits.

CT DEP ETPH

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
GC	BA41291	S4A2407	HP FID 3	BA41291-BLK1	G8009756.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40030	4A2407	BA41291-BS1	LCS	G8009757.D
SA40030	4A2407	BA41291-BSD1	LCS Dup	G8009758.D

CT DEP ETPH

Dilutions: No sample dilutions were required.

CT DEP ETPH

Internal Standards / Surrogates

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 6020B

Metals, CTDEP RCP, ICP/MS (Full List)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : Metals, CTDEP RCP, ICP/MS (Full List)

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Initial Cal Check	S4A2601-ICV1	Nexion2000C	QBIMX012524C-006
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Initial Cal Blank	S4A2601-ICB1	Nexion2000C	QBIMX012524C-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Check	S4A2601-CCV1	Nexion2000C	QBIMX012524C-008
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Blank	S4A2601-CCB1	Nexion2000C	QBIMX012524C-009
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Instrument RL Check	S4A2601-CRL1	Nexion2000C	QBIMX012524C-013
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Interference Check A	S4A2601-IFA1	Nexion2000C	QBIMX012524C-014
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Interference Check B	S4A2601-IFB1	Nexion2000C	QBIMX012524C-015
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Check	S4A2601-CCV2	Nexion2000C	QBIMX012524C-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Blank	S4A2601-CCB2	Nexion2000C	QBIMX012524C-017
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	Blank	BA41508-BLK1	Nexion2000C	QBIMX012524C-019
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	LCS	BA41508-BS1	Nexion2000C	QBIMX012524C-020
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	MW-1R	24A1057-01	Nexion2000C	QBIMX012524C-022
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	MW-3	24A1057-02	Nexion2000C	QBIMX012524C-023
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	MW-6	24A1057-03	Nexion2000C	QBIMX012524C-024
Metals, CTDEP RCP, ICP/MS (Full List)	BA41508	S4A2601	DUP	24A1057-04	Nexion2000C	QBIMX012524C-025
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Check	S4A2601-CCV3	Nexion2000C	QBIMX012524C-028
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Blank	S4A2601-CCB3	Nexion2000C	QBIMX012524C-029
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Check	S4A2601-CCV4	Nexion2000C	QBIMX012524C-042
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601	S4A2601	Calibration Blank	S4A2601-CCB4	Nexion2000C	QBIMX012524C-043

Initial calibration for EPA 6020B met method guidelines.

York Analytical Work Order Narrative

EPA 6020B

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 6020B

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
Metals, CTDEP RCP, ICP/MS (F	S4A2601	S4A2601-CCV1	QBIMX012524C-008	01/25/24 13:26
Metals, CTDEP RCP, ICP/MS (F	S4A2601	S4A2601-CCV2	QBIMX012524C-016	01/25/24 13:55
Metals, CTDEP RCP, ICP/MS (F	S4A2601	S4A2601-CCV3	QBIMX012524C-028	01/25/24 14:40
Metals, CTDEP RCP, ICP/MS (F	S4A2601	S4A2601-CCV4	QBIMX012524C-042	01/25/24 15:38
Metals, CTDEP RCP, ICP/MS (F	S4A2601	S4A2601-ICV1	QBIMX012524C-006	01/25/24 13:19

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601-CCV3	Antimony	ug/mL	0.057	0.050	113	90 110	QBIMX012524C-028
Metals, CTDEP RCP, ICP/MS (Full List)	S4A2601-CCV3	Thallium	ug/mL	0.055	0.050	111	90 110	QBIMX012524C-028

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
Metals, CTDEP RC	S4A2601	S4A2601-IFA1	Interference Check A		QBIMX012524C-014
Metals, CTDEP RC	S4A2601	S4A2601-IFB1	Interference Check B		QBIMX012524C-015
Metals, CTDEP RC	S4A2601	BA41508-BS1	LCS		QBIMX012524C-020
Metals, CTDEP RC	S4A2601	S4A2601-CCB4	Calibration Blank		QBIMX012524C-043

EPA 6020B

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
METALS	BA41508	S4A2601	Nexion2000C	BA41508-BLK1	QBIMX012524C-019

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	4A2601	BA41508-BS1	LCS	QBIMX012524C-020

York Analytical Work Order Narrative

EPA 6020B

Dilutions: No sample dilutions were required.

EPA 6020B

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 7470

Mercury by 7470/7471

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : none

Samples and QC analyzed using this calibration / sequence.

Initial calibration for **EPA 7470** **met method guidelines.**

EPA 7470

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 7470

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

EPA 7470

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
none		BA41272-BS1	LCS	QBHg01192024A-003
none		BA41272-BS2	LCS	QBHg01192024A-012

EPA 7470

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

York Analytical Laboratories, Inc.

Formulae Used for Sample Calculations

1. Volatiles in Air-ppbv

C_x (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_X = \frac{(A_X)(Cis)(DF)}{(Ais)(RRF)}$$

2. Volatiles in Air-ug/m³

C_x (ug/m³)= Compound concentration in ug/m³

$$C_x (\text{ug/m}^3) = \frac{(\text{ppbv} \times \text{Molecular wt.})}{(24.040)}$$

3. Volatile Organics (water and soil), ug/L or ug/kg

Soils/Waters	Medium Level Soils
1. Acetone 2. Acetone 3. Acetone 4. Acetone 5. Acetone 6. Acetone 7. Acetone 8. Acetone 9. Acetone 10. Acetone 11. Acetone 12. Acetone 13. Acetone 14. Acetone 15. Acetone 16. Acetone 17. Acetone 18. Acetone 19. Acetone 20. Acetone 21. Acetone 22. Acetone 23. Acetone 24. Acetone 25. Acetone 26. Acetone 27. Acetone 28. Acetone 29. Acetone 30. Acetone 31. Acetone 32. Acetone 33. Acetone 34. Acetone 35. Acetone 36. Acetone 37. Acetone 38. Acetone 39. Acetone 40. Acetone 41. Acetone 42. Acetone 43. Acetone 44. Acetone 45. Acetone 46. Acetone 47. Acetone 48. Acetone 49. Acetone 50. Acetone 51. Acetone 52. Acetone 53. Acetone 54. Acetone 55. Acetone 56. Acetone 57. Acetone 58. Acetone 59. Acetone 60. Acetone 61. Acetone 62. Acetone 63. Acetone 64. Acetone 65. Acetone 66. Acetone 67. Acetone 68. Acetone 69. Acetone 70. Acetone 71. Acetone 72. Acetone 73. Acetone 74. Acetone 75. Acetone 76. Acetone 77. Acetone 78. Acetone 79. Acetone 80. Acetone 81. Acetone 82. Acetone 83. Acetone 84. Acetone 85. Acetone 86. Acetone 87. Acetone 88. Acetone 89. Acetone 90. Acetone 91. Acetone 92. Acetone 93. Acetone 94. Acetone 95. Acetone 96. Acetone 97. Acetone 98. Acetone 99. Acetone 100. Acetone	1. Acetone 2. Acetone 3. Acetone 4. Acetone 5. Acetone 6. Acetone 7. Acetone 8. Acetone 9. Acetone 10. Acetone 11. Acetone 12. Acetone 13. Acetone 14. Acetone 15. Acetone 16. Acetone 17. Acetone 18. Acetone 19. Acetone 20. Acetone 21. Acetone 22. Acetone 23. Acetone 24. Acetone 25. Acetone 26. Acetone 27. Acetone 28. Acetone 29. Acetone 30. Acetone 31. Acetone 32. Acetone 33. Acetone 34. Acetone 35. Acetone 36. Acetone 37. Acetone 38. Acetone 39. Acetone 40. Acetone 41. Acetone 42. Acetone 43. Acetone 44. Acetone 45. Acetone 46. Acetone 47. Acetone 48. Acetone 49. Acetone 50. Acetone 51. Acetone 52. Acetone 53. Acetone 54. Acetone 55. Acetone 56. Acetone 57. Acetone 58. Acetone 59. Acetone 60. Acetone 61. Acetone 62. Acetone 63. Acetone 64. Acetone 65. Acetone 66. Acetone 67. Acetone 68. Acetone 69. Acetone 70. Acetone 71. Acetone 72. Acetone 73. Acetone 74. Acetone 75. Acetone 76. Acetone 77. Acetone 78. Acetone 79. Acetone 80. Acetone 81. Acetone 82. Acetone 83. Acetone 84. Acetone 85. Acetone 86. Acetone 87. Acetone 88. Acetone 89. Acetone 90. Acetone 91. Acetone 92. Acetone 93. Acetone 94. Acetone 95. Acetone 96. Acetone 97. Acetone 98. Acetone 99. Acetone 100. Acetone

$$C_X = \frac{(A_X)(IS)(DF)}{(A_{IS})(RRF)(V)(\% \text{ solids})} \quad C_X = \frac{(A_X)(IS)(VT)(1000)(DF)}{(A_{IS})(RRF)(VA)(V)(\% \text{ solids})}$$

4. Semi-Volatiles (waters and soils)

$$C_X = \frac{(A_X)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

5. Pesticides/PCB (waters and soils), DRO, CTETPH

$$C_X = \frac{(A_X)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

Cx = concentration of analyte as ug/L or ug/kg

A_x = Area of the characteristic ion for the compound to be measured, counts.

Ais = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

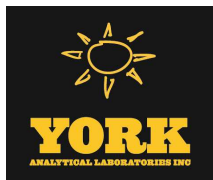
VA = volume of MeOH aliquot for medium level soils

VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



Analytical Batch Summary

Batch ID: BA41229 **Preparation Method:** EPA 1633 Prep **Prepared By:** AM

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-03	MW-6	01/19/24
BA41229-BLK1	Blank	01/19/24
BA41229-BS1	LCS	01/19/24
BA41229-BS2	LCS	01/19/24

Batch ID: BA41272 **Preparation Method:** EPA SW846-7470A **Prepared By:** PFA

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/19/24
24A1057-02	MW-3	01/19/24
24A1057-03	MW-6	01/19/24
24A1057-04	DUP	01/19/24
BA41272-BLK1	Blank	01/19/24
BA41272-BLK2	Blank	01/19/24
BA41272-BS1	LCS	01/19/24
BA41272-BS2	LCS	01/19/24

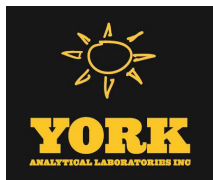
Batch ID: BA41291 **Preparation Method:** EPA SW846-3510C Low Level **Prepared By:** moa

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/19/24
24A1057-02	MW-3	01/19/24
24A1057-03	MW-6	01/19/24
24A1057-04	DUP	01/19/24
BA41291-BLK1	Blank	01/19/24
BA41291-BS1	LCS	01/19/24
BA41291-BSD1	LCS Dup	01/19/24

Batch ID: BA41318 **Preparation Method:** EPA 3510C **Prepared By:** JJG

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/20/24
24A1057-02	MW-3	01/20/24
24A1057-03	MW-6	01/20/24
24A1057-04	DUP	01/20/24
BA41318-BLK1	Blank	01/20/24
BA41318-BLK2	Blank	01/20/24
BA41318-BS1	LCS	01/20/24
BA41318-BS2	LCS	01/20/24
BA41318-BSD1	LCS Dup	01/20/24

Batch ID: BA41369 **Preparation Method:** EPA 3535A **Prepared By:** JM



YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/22/24
24A1057-02	MW-3	01/22/24
24A1057-03	MW-6	01/22/24
24A1057-04	DUP	01/22/24
BA41369-BLK1	Blank	01/22/24
BA41369-BS1	LCS	01/22/24

Batch ID: BA41508 **Preparation Method:** EPA 3015A **Prepared By:** DBT

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/24/24
24A1057-02	MW-3	01/24/24
24A1057-03	MW-6	01/24/24
24A1057-04	DUP	01/24/24
BA41508-BLK1	Blank	01/24/24
BA41508-BS1	LCS	01/24/24

Batch ID: BA41524 **Preparation Method:** EPA 5030B **Prepared By:** SMA

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-05	Trip Blank	01/24/24
BA41524-BLK1	Blank	01/24/24
BA41524-BS1	LCS	01/24/24
BA41524-BSD1	LCS Dup	01/24/24

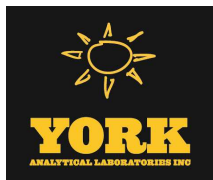
Batch ID: BA41525 **Preparation Method:** EPA 5030B **Prepared By:** SMA

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	01/24/24
24A1057-02	MW-3	01/24/24
24A1057-03	MW-6	01/24/24
24A1057-04	DUP	01/24/24
BA41525-BLK1	Blank	01/24/24
BA41525-BS1	LCS	01/24/24
BA41525-BSD1	LCS Dup	01/24/24

Batch ID: BA41789 **Preparation Method:** EPA 1633 Prep **Prepared By:** J D

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-04	DUP	01/27/24
BA41789-BLK1	Blank	01/27/24
BA41789-BS1	LCS	01/27/24
BA41789-BS2	LCS	01/27/24
BA41789-DUP1	Duplicate	01/27/24

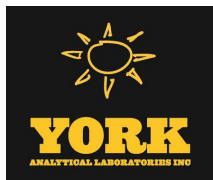
Batch ID: BB40180 **Preparation Method:** EPA 1633 Prep **Prepared By:** AM



YORK Sample ID	Client Sample ID	Preparation Date
24A1057-02	MW-3	02/03/24
24A1057-02RE1	MW-3	02/03/24
BB40180-BLK1	Blank	02/03/24
BB40180-BS1	LCS	02/03/24
BB40180-BS2	LCS	02/03/24

Batch ID: BB40651 **Preparation Method:** EPA 1633 Prep **Prepared By:** AM

YORK Sample ID	Client Sample ID	Preparation Date
24A1057-01	MW-1R	02/10/24
BB40651-BLK1	Blank	02/10/24
BB40651-BS1	LCS	02/10/24
BB40651-BS2	LCS	02/10/24



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

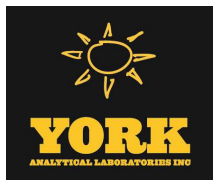
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41524 - EPA 5030B

Blank (BA41524-BLK1)

Prepared & Analyzed: 01/24/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Chlorotoluene	ND	0.500	"
4-Methyl-2-pentanone	ND	0.500	"
Acetone	ND	2.00	"
Acrylonitrile	ND	0.500	"
Benzene	ND	0.500	"
Bromobenzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"
Bromoform	ND	0.500	"
Bromomethane	ND	0.500	"
Carbon disulfide	ND	0.500	"
Carbon tetrachloride	ND	0.500	"
Chlorobenzene	ND	0.500	"
Chloroethane	ND	0.500	"
Chloroform	ND	0.500	"
Chloromethane	ND	0.500	"
cis-1,2-Dichloroethylene	ND	0.500	"
cis-1,3-Dichloropropylene	ND	0.500	"
Dibromochloromethane	ND	0.500	"
Dibromomethane	ND	0.500	"
Dichlorodifluoromethane	ND	0.500	"
Ethyl Benzene	ND	0.500	"
Hexachlorobutadiene	ND	0.500	"
Isopropylbenzene	ND	0.500	"
Methyl Methacrylate	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41524 - EPA 5030B

Blank (BA41524-BLK1)

Prepared & Analyzed: 01/24/2024

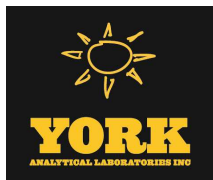
Methyl tert-butyl ether (MTBE)	ND	0.500	ug/L
Methylene chloride	ND	2.00	"
Naphthalene	ND	2.00	"
n-Butylbenzene	ND	0.500	"
n-Propylbenzene	ND	0.500	"
o-Xylene	ND	0.500	"
p- & m- Xylenes	ND	1.00	"
p-Isopropyltoluene	ND	0.500	"
sec-Butylbenzene	ND	0.500	"
Styrene	ND	0.500	"
tert-Butylbenzene	ND	0.500	"
Tetrachloroethylene	ND	0.500	"
Tetrahydrofuran	ND	4.00	"
Toluene	ND	0.500	"
trans-1,2-Dichloroethylene	ND	0.500	"
trans-1,3-Dichloropropylene	ND	0.500	"
trans-1,4-dichloro-2-butene	ND	0.500	"
Trichloroethylene	ND	0.500	"
Trichlorofluoromethane	ND	0.500	"
Vinyl Chloride	ND	0.500	"

Surrogate: SURR: 1,2-Dichloroethane-d4	10.5	"	10.0	105	70-130
Surrogate: SURR: Toluene-d8	8.77	"	10.0	87.7	70-130
Surrogate: SURR: p-Bromofluorobenzene	9.89	"	10.0	98.9	70-130

LCS (BA41524-BS1)

Prepared & Analyzed: 01/24/2024

1,1,1,2-Tetrachloroethane	8.99	ug/L	10.0	89.9	70-130
1,1,1-Trichloroethane	10.6	"	10.0	106	70-130
1,1,2,2-Tetrachloroethane	9.06	"	10.0	90.6	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.1	"	10.0	121	70-130
1,1,2-Trichloroethane	9.44	"	10.0	94.4	70-130
1,1-Dichloroethane	10.5	"	10.0	105	70-130
1,1-Dichloroethylene	11.5	"	10.0	115	70-130
1,1-Dichloropropylene	10.9	"	10.0	109	70-130
1,2,3-Trichlorobenzene	9.07	"	10.0	90.7	70-130
1,2,3-Trichloropropane	8.72	"	10.0	87.2	70-130
1,2,4-Trichlorobenzene	9.06	"	10.0	90.6	70-130
1,2,4-Trimethylbenzene	8.77	"	10.0	87.7	70-130
1,2-Dibromo-3-chloropropane	9.38	"	10.0	93.8	70-130
1,2-Dibromoethane	9.27	"	10.0	92.7	70-130
1,2-Dichlorobenzene	8.60	"	10.0	86.0	70-130
1,2-Dichloroethane	11.3	"	10.0	113	70-130
1,2-Dichloropropane	9.10	"	10.0	91.0	70-130
1,3,5-Trimethylbenzene	8.70	"	10.0	87.0	70-130
1,3-Dichlorobenzene	8.27	"	10.0	82.7	70-130
1,3-Dichloropropane	9.41	"	10.0	94.1	70-130
1,4-Dichlorobenzene	8.29	"	10.0	82.9	70-130
2,2-Dichloropropane	11.3	"	10.0	113	70-130
2-Butanone	10.1	"	10.0	101	70-130
2-Chlorotoluene	8.27	"	10.0	82.7	70-130
2-Hexanone	9.20	"	10.0	92.0	70-130
4-Chlorotoluene	8.38	"	10.0	83.8	70-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

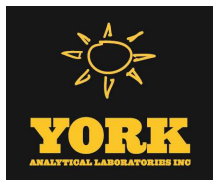
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41524 - EPA 5030B

LCS (BA41524-BS1)

Prepared & Analyzed: 01/24/2024

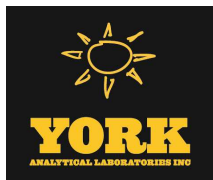
4-Methyl-2-pentanone	9.87		ug/L	10.0		98.7	70-130				
Acetone	7.34		"	10.0		73.4	70-130				
Acrylonitrile	12.0		"	10.0		120	70-130				
Benzene	11.2		"	10.0		112	70-130				
Bromobenzene	8.24		"	10.0		82.4	70-130				
Bromochloromethane	10.9		"	10.0		109	70-130				
Bromodichloromethane	9.09		"	10.0		90.9	70-130				
Bromoform	9.39		"	10.0		93.9	70-130				
Bromomethane	10.3		"	10.0		103	70-130				
Carbon disulfide	11.6		"	10.0		116	70-130				
Carbon tetrachloride	11.2		"	10.0		112	70-130				
Chlorobenzene	9.18		"	10.0		91.8	70-130				
Chloroethane	10.7		"	10.0		107	70-130				
Chloroform	10.7		"	10.0		107	70-130				
Chloromethane	11.1		"	10.0		111	70-130				
cis-1,2-Dichloroethylene	10.9		"	10.0		109	70-130				
cis-1,3-Dichloropropylene	8.93		"	10.0		89.3	70-130				
Dibromochloromethane	9.20		"	10.0		92.0	70-130				
Dibromomethane	9.50		"	10.0		95.0	70-130				
Dichlorodifluoromethane	12.7		"	10.0		127	70-130				
Ethyl Benzene	9.29		"	10.0		92.9	70-130				
Hexachlorobutadiene	8.95		"	10.0		89.5	70-130				
Isopropylbenzene	8.39		"	10.0		83.9	70-130				
Methyl Methacrylate	10.1		"	10.0		101	70-130				
Methyl tert-butyl ether (MTBE)	11.0		"	10.0		110	70-130				
Methylene chloride	11.3		"	10.0		113	70-130				
Naphthalene	9.38		"	10.0		93.8	70-130				
n-Butylbenzene	8.90		"	10.0		89.0	70-130				
n-Propylbenzene	8.32		"	10.0		83.2	70-130				
o-Xylene	9.20		"	10.0		92.0	70-130				
p- & m- Xylenes	18.6		"	20.0		92.8	70-130				
p-Isopropyltoluene	8.67		"	10.0		86.7	70-130				
sec-Butylbenzene	8.50		"	10.0		85.0	70-130				
Styrene	9.53		"	10.0		95.3	70-130				
tert-Butylbenzene	8.36		"	10.0		83.6	70-130				
Tetrachloroethylene	7.08		"	10.0		70.8	70-130				
Tetrahydrofuran	10.9		"	10.0		109	70-130				
Toluene	9.20		"	10.0		92.0	70-130				
trans-1,2-Dichloroethylene	11.0		"	10.0		110	70-130				
trans-1,3-Dichloropropylene	9.26		"	10.0		92.6	70-130				
trans-1,4-dichloro-2-butene	8.75		"	10.0		87.5	70-130				
Trichloroethylene	8.86		"	10.0		88.6	70-130				
Trichlorofluoromethane	11.6		"	10.0		116	70-130				
Vinyl Chloride	11.4		"	10.0		114	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	10.2		"	10.0		102	70-130				
Surrogate: SURR: Toluene-d8	8.88		"	10.0		88.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.63		"	10.0		96.3	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA41524 - EPA 5030B											
LCS Dup (BA41524-BSD1)						Prepared & Analyzed: 01/24/2024					
1,1,1,2-Tetrachloroethane	9.02		ug/L	10.0		90.2	70-130		0.333	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	70-130		3.74	30	
1,1,2,2-Tetrachloroethane	9.75		"	10.0		97.5	70-130		7.34	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5		"	10.0		115	70-130		4.49	30	
1,1,2-Trichloroethane	9.90		"	10.0		99.0	70-130		4.76	30	
1,1-Dichloroethane	10.3		"	10.0		103	70-130		1.83	30	
1,1-Dichloroethylene	11.2		"	10.0		112	70-130		2.74	30	
1,1-Dichloropropylene	10.6		"	10.0		106	70-130		3.44	30	
1,2,3-Trichlorobenzene	9.09		"	10.0		90.9	70-130		0.220	30	
1,2,3-Trichloropropane	9.43		"	10.0		94.3	70-130		7.82	30	
1,2,4-Trichlorobenzene	8.89		"	10.0		88.9	70-130		1.89	30	
1,2,4-Trimethylbenzene	8.37		"	10.0		83.7	70-130		4.67	30	
1,2-Dibromo-3-chloropropane	9.60		"	10.0		96.0	70-130		2.32	30	
1,2-Dibromoethane	9.81		"	10.0		98.1	70-130		5.66	30	
1,2-Dichlorobenzene	8.40		"	10.0		84.0	70-130		2.35	30	
1,2-Dichloroethane	11.6		"	10.0		116	70-130		2.36	30	
1,2-Dichloropropane	9.03		"	10.0		90.3	70-130		0.772	30	
1,3,5-Trimethylbenzene	8.26		"	10.0		82.6	70-130		5.19	30	
1,3-Dichlorobenzene	8.05		"	10.0		80.5	70-130		2.70	30	
1,3-Dichloropropane	9.87		"	10.0		98.7	70-130		4.77	30	
1,4-Dichlorobenzene	8.16		"	10.0		81.6	70-130		1.58	30	
2,2-Dichloropropane	10.8		"	10.0		108	70-130		4.97	30	
2-Butanone	11.1		"	10.0		111	70-130		9.56	30	
2-Chlorotoluene	7.93		"	10.0		79.3	70-130		4.20	30	
2-Hexanone	10.2		"	10.0		102	70-130		9.82	30	
4-Chlorotoluene	8.02		"	10.0		80.2	70-130		4.39	30	
4-Methyl-2-pentanone	10.9		"	10.0		109	70-130		10.3	30	
Acetone	7.74		"	10.0		77.4	70-130		5.31	30	
Acrylonitrile	13.4		"	10.0		134	70-130	High Bias	10.9	30	
Benzene	11.0		"	10.0		110	70-130		2.35	30	
Bromobenzene	8.17		"	10.0		81.7	70-130		0.853	30	
Bromochloromethane	11.2		"	10.0		112	70-130		2.08	30	
Bromodichloromethane	9.13		"	10.0		91.3	70-130		0.439	30	
Bromoform	9.91		"	10.0		99.1	70-130		5.39	30	
Bromomethane	9.57		"	10.0		95.7	70-130		7.25	30	
Carbon disulfide	11.2		"	10.0		112	70-130		3.76	30	
Carbon tetrachloride	10.7		"	10.0		107	70-130		5.11	30	
Chlorobenzene	8.98		"	10.0		89.8	70-130		2.20	30	
Chloroethane	10.3		"	10.0		103	70-130		4.38	30	
Chloroform	10.6		"	10.0		106	70-130		1.13	30	
Chloromethane	10.6		"	10.0		106	70-130		4.60	30	
cis-1,2-Dichloroethylene	10.7		"	10.0		107	70-130		1.85	30	
cis-1,3-Dichloropropylene	9.02		"	10.0		90.2	70-130		1.00	30	
Dibromochloromethane	9.49		"	10.0		94.9	70-130		3.10	30	
Dibromomethane	9.75		"	10.0		97.5	70-130		2.60	30	
Dichlorodifluoromethane	11.5		"	10.0		115	70-130		10.2	30	
Ethyl Benzene	8.94		"	10.0		89.4	70-130		3.84	30	
Hexachlorobutadiene	8.02		"	10.0		80.2	70-130		11.0	30	
Isopropylbenzene	8.02		"	10.0		80.2	70-130		4.51	30	
Methyl Methacrylate	10.8		"	10.0		108	70-130		6.59	30	
Methyl tert-butyl ether (MTBE)	11.9		"	10.0		119	70-130		7.49	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41524 - EPA 5030B

LCS Dup (BA41524-BSD1)

Prepared & Analyzed: 01/24/2024

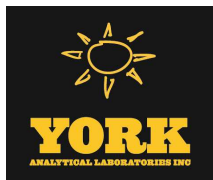
Methylene chloride	11.5		ug/L	10.0		115	70-130		1.84	30
Naphthalene	9.77		"	10.0		97.7	70-130		4.07	30
n-Butylbenzene	8.31		"	10.0		83.1	70-130		6.86	30
n-Propylbenzene	7.94		"	10.0		79.4	70-130		4.67	30
o-Xylene	8.92		"	10.0		89.2	70-130		3.09	30
p- & m- Xylenes	17.9		"	20.0		89.4	70-130		3.84	30
p-Isopropyltoluene	8.30		"	10.0		83.0	70-130		4.36	30
sec-Butylbenzene	7.99		"	10.0		79.9	70-130		6.19	30
Styrene	9.25		"	10.0		92.5	70-130		2.98	30
tert-Butylbenzene	7.93		"	10.0		79.3	70-130		5.28	30
Tetrachloroethylene	6.63		"	10.0		66.3	70-130	Low Bias	6.56	30
Tetrahydrofuran	11.8		"	10.0		118	70-130		7.65	30
Toluene	8.90		"	10.0		89.0	70-130		3.31	30
trans-1,2-Dichloroethylene	10.5		"	10.0		105	70-130		4.18	30
trans-1,3-Dichloropropylene	9.52		"	10.0		95.2	70-130		2.77	30
trans-1,4-dichloro-2-butene	9.27		"	10.0		92.7	70-130		5.77	30
Trichloroethylene	8.60		"	10.0		86.0	70-130		2.98	30
Trichlorofluoromethane	11.1		"	10.0		111	70-130		5.02	30
Vinyl Chloride	10.7		"	10.0		107	70-130		6.78	30
Surrogate: SURR: 1,2-Dichloroethane-d4	10.6		"	10.0		106	70-130			
Surrogate: SURR: Toluene-d8	8.81		"	10.0		88.1	70-130			
Surrogate: SURR: p-Bromofluorobenzene	9.77		"	10.0		97.7	70-130			

Batch BA41525 - EPA 5030B

Blank (BA41525-BLK1)

Prepared & Analyzed: 01/24/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

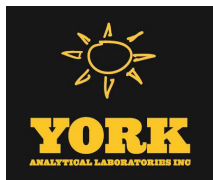
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41525 - EPA 5030B

Blank (BA41525-BLK1)

Prepared & Analyzed: 01/24/2024

4-Chlorotoluene	ND	0.500	ug/L								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl Methacrylate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Tetrahydrofuran	ND	4.00	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
trans-1,4-dichloro-2-butene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	10.9		"	10.0		109	70-130				
Surrogate: SURR: Toluene-d8	10.6		"	10.0		106	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.60		"	10.0		96.0	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

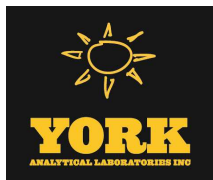
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41525 - EPA 5030B

LCS (BA41525-BS1)

Prepared & Analyzed: 01/24/2024

1,1,1,2-Tetrachloroethane	10.6		ug/L	10.0		106	70-130				
1,1,1-Trichloroethane	8.66		"	10.0		86.6	70-130				
1,1,2,2-Tetrachloroethane	11.2		"	10.0		112	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.43		"	10.0		94.3	70-130				
1,1,2-Trichloroethane	9.80		"	10.0		98.0	70-130				
1,1-Dichloroethane	7.86		"	10.0		78.6	70-130				
1,1-Dichloroethylene	8.89		"	10.0		88.9	70-130				
1,1-Dichloropropylene	8.34		"	10.0		83.4	70-130				
1,2,3-Trichlorobenzene	12.0		"	10.0		120	70-130				
1,2,3-Trichloropropane	10.5		"	10.0		105	70-130				
1,2,4-Trichlorobenzene	12.1		"	10.0		121	70-130				
1,2,4-Trimethylbenzene	10.7		"	10.0		107	70-130				
1,2-Dibromo-3-chloropropane	10.3		"	10.0		103	70-130				
1,2-Dibromoethane	10.3		"	10.0		103	70-130				
1,2-Dichlorobenzene	10.6		"	10.0		106	70-130				
1,2-Dichloroethane	8.66		"	10.0		86.6	70-130				
1,2-Dichloropropane	9.42		"	10.0		94.2	70-130				
1,3,5-Trimethylbenzene	10.6		"	10.0		106	70-130				
1,3-Dichlorobenzene	10.5		"	10.0		105	70-130				
1,3-Dichloropropane	9.66		"	10.0		96.6	70-130				
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130				
2,2-Dichloropropane	9.43		"	10.0		94.3	70-130				
2-Butanone	7.40		"	10.0		74.0	70-130				
2-Chlorotoluene	10.1		"	10.0		101	70-130				
2-Hexanone	9.10		"	10.0		91.0	70-130				
4-Chlorotoluene	10.0		"	10.0		100	70-130				
4-Methyl-2-pentanone	9.81		"	10.0		98.1	70-130				
Acetone	5.04		"	10.0		50.4	70-130	Low Bias			
Acrylonitrile	8.88		"	10.0		88.8	70-130				
Benzene	8.31		"	10.0		83.1	70-130				
Bromobenzene	9.91		"	10.0		99.1	70-130				
Bromochloromethane	7.73		"	10.0		77.3	70-130				
Bromodichloromethane	10.1		"	10.0		101	70-130				
Bromoform	9.63		"	10.0		96.3	70-130				
Bromomethane	11.7		"	10.0		117	70-130				
Carbon disulfide	8.55		"	10.0		85.5	70-130				
Carbon tetrachloride	9.65		"	10.0		96.5	70-130				
Chlorobenzene	9.86		"	10.0		98.6	70-130				
Chloroethane	7.58		"	10.0		75.8	70-130				
Chloroform	8.13		"	10.0		81.3	70-130				
Chloromethane	10.3		"	10.0		103	70-130				
cis-1,2-Dichloroethylene	8.41		"	10.0		84.1	70-130				
cis-1,3-Dichloropropylene	9.82		"	10.0		98.2	70-130				
Dibromochloromethane	9.38		"	10.0		93.8	70-130				
Dibromomethane	9.78		"	10.0		97.8	70-130				
Dichlorodifluoromethane	9.73		"	10.0		97.3	70-130				
Ethyl Benzene	9.90		"	10.0		99.0	70-130				
Hexachlorobutadiene	11.5		"	10.0		115	70-130				
Isopropylbenzene	10.2		"	10.0		102	70-130				
Methyl Methacrylate	10.3		"	10.0		103	70-130				
Methyl tert-butyl ether (MTBE)	8.62		"	10.0		86.2	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41525 - EPA 5030B

LCS (BA41525-BS1)

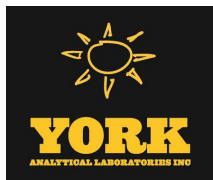
Prepared & Analyzed: 01/24/2024

Methylene chloride	8.90		ug/L	10.0		89.0	70-130				
Naphthalene	11.2		"	10.0		112	70-130				
n-Butylbenzene	10.7		"	10.0		107	70-130				
n-Propylbenzene	10.1		"	10.0		101	70-130				
o-Xylene	9.78		"	10.0		97.8	70-130				
p- & m- Xylenes	19.9		"	20.0		99.4	70-130				
p-Isopropyltoluene	10.9		"	10.0		109	70-130				
sec-Butylbenzene	10.4		"	10.0		104	70-130				
Styrene	10.2		"	10.0		102	70-130				
tert-Butylbenzene	10.3		"	10.0		103	70-130				
Tetrachloroethylene	5.84		"	10.0		58.4	70-130	Low Bias			
Tetrahydrofuran	7.89		"	10.0		78.9	70-130				
Toluene	9.75		"	10.0		97.5	70-130				
trans-1,2-Dichloroethylene	8.30		"	10.0		83.0	70-130				
trans-1,3-Dichloropropylene	9.33		"	10.0		93.3	70-130				
trans-1,4-dichloro-2-butene	10.2		"	10.0		102	70-130				
Trichloroethylene	9.31		"	10.0		93.1	70-130				
Trichlorofluoromethane	9.47		"	10.0		94.7	70-130				
Vinyl Chloride	8.82		"	10.0		88.2	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	10.7		"	10.0		107	70-130				
Surrogate: SURR: Toluene-d8	10.7		"	10.0		107	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.67		"	10.0		96.7	70-130				

LCS Dup (BA41525-BS1)

Prepared & Analyzed: 01/24/2024

1,1,1,2-Tetrachloroethane	10.4		ug/L	10.0		104	70-130		2.29	30	
1,1,1-Trichloroethane	8.37		"	10.0		83.7	70-130		3.41	30	
1,1,2,2-Tetrachloroethane	11.2		"	10.0		112	70-130		0.00	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.07		"	10.0		90.7	70-130		3.89	30	
1,1,2-Trichloroethane	9.74		"	10.0		97.4	70-130		0.614	30	
1,1-Dichloroethane	7.63		"	10.0		76.3	70-130		2.97	30	
1,1-Dichloroethylene	8.40		"	10.0		84.0	70-130		5.67	30	
1,1-Dichloropropylene	7.95		"	10.0		79.5	70-130		4.79	30	
1,2,3-Trichlorobenzene	12.0		"	10.0		120	70-130		0.417	30	
1,2,3-Trichloropropane	10.6		"	10.0		106	70-130		0.662	30	
1,2,4-Trichlorobenzene	12.0		"	10.0		120	70-130		0.748	30	
1,2,4-Trimethylbenzene	10.5		"	10.0		105	70-130		1.89	30	
1,2-Dibromo-3-chloropropane	10.3		"	10.0		103	70-130		0.679	30	
1,2-Dibromoethane	10.2		"	10.0		102	70-130		1.27	30	
1,2-Dichlorobenzene	10.5		"	10.0		105	70-130		1.32	30	
1,2-Dichloroethane	8.60		"	10.0		86.0	70-130		0.695	30	
1,2-Dichloropropane	9.16		"	10.0		91.6	70-130		2.80	30	
1,3,5-Trimethylbenzene	10.3		"	10.0		103	70-130		3.26	30	
1,3-Dichlorobenzene	10.3		"	10.0		103	70-130		1.54	30	
1,3-Dichloropropane	9.64		"	10.0		96.4	70-130		0.207	30	
1,4-Dichlorobenzene	10.2		"	10.0		102	70-130		1.84	30	
2,2-Dichloropropane	8.96		"	10.0		89.6	70-130		5.11	30	
2-Butanone	7.35		"	10.0		73.5	70-130		0.678	30	
2-Chlorotoluene	9.76		"	10.0		97.6	70-130		3.13	30	
2-Hexanone	9.07		"	10.0		90.7	70-130		0.330	30	
4-Chlorotoluene	9.82		"	10.0		98.2	70-130		2.22	30	
4-Methyl-2-pentanone	9.77		"	10.0		97.7	70-130		0.409	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

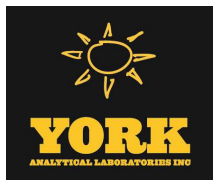
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41525 - EPA 5030B

LCS Dup (BA41525-BSD1)

Prepared & Analyzed: 01/24/2024

Acetone	5.12		ug/L	10.0		51.2	70-130	Low Bias	1.57	30	
Acrylonitrile	9.04		"	10.0		90.4	70-130		1.79	30	
Benzene	8.09		"	10.0		80.9	70-130		2.68	30	
Bromobenzene	9.78		"	10.0		97.8	70-130		1.32	30	
Bromochloromethane	7.74		"	10.0		77.4	70-130		0.129	30	
Bromodichloromethane	9.85		"	10.0		98.5	70-130		2.70	30	
Bromoform	9.53		"	10.0		95.3	70-130		1.04	30	
Bromomethane	11.8		"	10.0		118	70-130		0.765	30	
Carbon disulfide	8.09		"	10.0		80.9	70-130		5.53	30	
Carbon tetrachloride	9.23		"	10.0		92.3	70-130		4.45	30	
Chlorobenzene	9.54		"	10.0		95.4	70-130		3.30	30	
Chloroethane	7.22		"	10.0		72.2	70-130		4.86	30	
Chloroform	7.92		"	10.0		79.2	70-130		2.62	30	
Chloromethane	9.81		"	10.0		98.1	70-130		4.68	30	
cis-1,2-Dichloroethylene	8.04		"	10.0		80.4	70-130		4.50	30	
cis-1,3-Dichloropropylene	9.63		"	10.0		96.3	70-130		1.95	30	
Dibromochloromethane	9.33		"	10.0		93.3	70-130		0.534	30	
Dibromomethane	9.67		"	10.0		96.7	70-130		1.13	30	
Dichlorodifluoromethane	9.23		"	10.0		92.3	70-130		5.27	30	
Ethyl Benzene	9.61		"	10.0		96.1	70-130		2.97	30	
Hexachlorobutadiene	10.8		"	10.0		108	70-130		6.46	30	
Isopropylbenzene	9.88		"	10.0		98.8	70-130		2.79	30	
Methyl Methacrylate	10.4		"	10.0		104	70-130		0.193	30	
Methyl tert-butyl ether (MTBE)	8.58		"	10.0		85.8	70-130		0.465	30	
Methylene chloride	9.07		"	10.0		90.7	70-130		1.89	30	
Naphthalene	11.4		"	10.0		114	70-130		1.95	30	
n-Butylbenzene	10.4		"	10.0		104	70-130		2.66	30	
n-Propylbenzene	9.86		"	10.0		98.6	70-130		2.40	30	
o-Xylene	9.56		"	10.0		95.6	70-130		2.28	30	
p- & m- Xylenes	19.3		"	20.0		96.6	70-130		2.86	30	
p-Isopropyltoluene	10.7		"	10.0		107	70-130		2.13	30	
sec-Butylbenzene	10.2		"	10.0		102	70-130		2.23	30	
Styrene	9.98		"	10.0		99.8	70-130		2.47	30	
tert-Butylbenzene	9.99		"	10.0		99.9	70-130		2.86	30	
Tetrachloroethylene	5.61		"	10.0		56.1	70-130	Low Bias	4.02	30	
Tetrahydrofuran	8.11		"	10.0		81.1	70-130		2.75	30	
Toluene	9.42		"	10.0		94.2	70-130		3.44	30	
trans-1,2-Dichloroethylene	7.97		"	10.0		79.7	70-130		4.06	30	
trans-1,3-Dichloropropylene	9.23		"	10.0		92.3	70-130		1.08	30	
trans-1,4-dichloro-2-butene	10.0		"	10.0		100	70-130		1.78	30	
Trichloroethylene	8.94		"	10.0		89.4	70-130		4.05	30	
Trichlorofluoromethane	9.04		"	10.0		90.4	70-130		4.65	30	
Vinyl Chloride	8.39		"	10.0		83.9	70-130		5.00	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	10.6		"	10.0		106	70-130				
Surrogate: SURR: Toluene-d8	10.7		"	10.0		107	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.63		"	10.0		96.3	70-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41318 - EPA 3510C

Blank (BA41318-BLK1)

Prepared: 01/20/2024 Analyzed: 01/21/2024

2-Methylnaphthalene	ND	5.00	ug/L								
Surrogate: SURR: Nitrobenzene-d5	15.7		"	25.0		62.8	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	18.0		"	25.0		71.8	30-130				
Surrogate: SURR: Terphenyl-d14	22.9		"	25.0		91.6	30-130				

Blank (BA41318-BLK2)

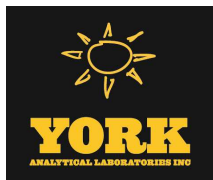
Prepared: 01/20/2024 Analyzed: 01/22/2024

Acenaphthene	ND	0.0500	ug/L								
Acenaphthylene	ND	0.0500	"								
Anthracene	ND	0.0500	"								
Benzo(a)anthracene	ND	0.0500	"								
Benzo(a)pyrene	ND	0.0500	"								
Benzo(b)fluoranthene	ND	0.0500	"								
Benzo(g,h,i)perylene	ND	0.0500	"								
Benzo(k)fluoranthene	ND	0.0500	"								
Chrysene	ND	0.0500	"								
Dibenzo(a,h)anthracene	ND	0.0500	"								
Fluoranthene	ND	0.0500	"								
Fluorene	ND	0.0500	"								
Indeno(1,2,3-cd)pyrene	ND	0.0500	"								
Naphthalene	ND	0.0500	"								
Phenanthrene	ND	0.0500	"								
Pyrene	ND	0.0500	"								

LCS (BA41318-BS1)

Prepared: 01/20/2024 Analyzed: 01/21/2024

2-Methylnaphthalene	20.7	5.00	ug/L	25.0		82.7	40-140				
Surrogate: SURR: Nitrobenzene-d5	17.2		"	25.0		68.6	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	19.9		"	25.0		79.6	30-130				
Surrogate: SURR: Terphenyl-d14	23.3		"	25.0		93.3	30-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41318 - EPA 3510C

LCS (BA41318-BS2)

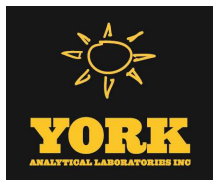
Prepared: 01/20/2024 Analyzed: 01/22/2024

Acenaphthene	0.730	0.0500	ug/L	1.00		73.0	40-140			
Acenaphthylene	0.780	0.0500	"	1.00		78.0	40-140			
Anthracene	0.520	0.0500	"	1.00		52.0	40-140			
Benzo(a)anthracene	0.770	0.0500	"	1.00		77.0	40-140			
Benzo(a)pyrene	0.610	0.0500	"	1.00		61.0	40-140			
Benzo(b)fluoranthene	0.810	0.0500	"	1.00		81.0	40-140			
Benzo(g,h,i)perylene	0.760	0.0500	"	1.00		76.0	40-140			
Benzo(k)fluoranthene	0.790	0.0500	"	1.00		79.0	40-140			
Chrysene	0.800	0.0500	"	1.00		80.0	40-140			
Dibenzo(a,h)anthracene	0.820	0.0500	"	1.00		82.0	40-140			
Fluoranthene	0.860	0.0500	"	1.00		86.0	40-140			
Fluorene	0.830	0.0500	"	1.00		83.0	40-140			
Indeno(1,2,3-cd)pyrene	0.790	0.0500	"	1.00		79.0	40-140			
Naphthalene	0.790	0.0500	"	1.00		79.0	40-140			
Phenanthrene	0.790	0.0500	"	1.00		79.0	40-140			
Pyrene	0.740	0.0500	"	1.00		74.0	40-140			

LCS Dup (BA41318-BSD1)

Prepared: 01/20/2024 Analyzed: 01/21/2024

2-Methylnaphthalene	20.5	5.00	ug/L	25.0		81.9	40-140	0.972	20	
Surrogate: SURR: Nitrobenzene-d5	17.3		"	25.0		69.1	30-130			
Surrogate: SURR: 2-Fluorobiphenyl	19.1		"	25.0		76.5	30-130			
Surrogate: SURR: Terphenyl-d14	23.0		"	25.0		92.1	30-130			



Semivolatile Organic Compounds by GC/MS/SIM - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41369 - EPA 3535A

Blank (BA41369-BLK1)

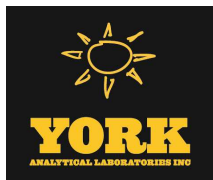
Prepared: 01/22/2024 Analyzed: 01/23/2024

1,4-Dioxane	ND	0.300	ug/L								
Surrogate: 1,4-Dioxane-d8	3.03		"	4.00		75.8	36.6-118				

LCS (BA41369-BS1)

Prepared: 01/22/2024 Analyzed: 01/23/2024

1,4-Dioxane	3.46	0.300	ug/L	4.00		86.4	50-130				
Surrogate: 1,4-Dioxane-d8	2.71		"	4.00		67.7	36.6-118				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

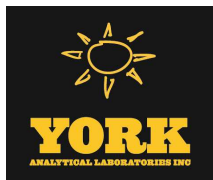
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41229 - EPA 1633 Prep

Blank (BA41229-BLK1)

Prepared & Analyzed: 01/19/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	4.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"								
Perfluorooctanoic acid (PFOA)	ND	4.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"								
Perfluorononanoic acid (PFNA)	ND	4.00	"								
Perfluorodecanoic acid (PFDA)	ND	4.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"								
Perfluorododecanoic acid (PFDoA)	ND	4.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	4.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"								
N-MeFOSAA	ND	4.00	"								
N-EtFOSAA	ND	4.00	"								
Perfluoropentanoic acid (PFPeA)	ND	8.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.4	"								
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	7.12	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	8.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"								
HFPO-DA (Gen-X)	ND	16.0	"								
11CL-PF3OUdS	ND	15.1	"								
9CL-PF3ONS	ND	15.0	"								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	46.8		"	38.8		121	25-150				
Surrogate: M5PFHxA	51.0		"	41.7		122	25-150				
Surrogate: M4PFHpA	50.1		"	41.7		120	25-150				
Surrogate: M3PFHxS	49.9		"	39.5		126	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	53.2		"	41.7		128	25-150				
Surrogate: M6PFDA	21.7		"	20.8		104	25-150				
Surrogate: M7PFUdA	20.2		"	20.8		97.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	19.2		"	20.8		92.3	25-150				
Surrogate: M2PFTeDA	10.6		"	20.8		50.8	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41229 - EPA 1633 Prep

Blank (BA41229-BLK1)

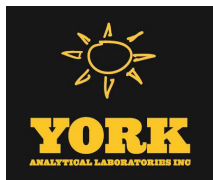
Prepared & Analyzed: 01/19/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	21.4		ng/L	167		12.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	49.3		"	39.9		124	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	97.9		"	83.3		118	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.7		"	41.7		115	10-150				
Surrogate: d3-N-MeFOSAA	85.2		"	83.3		102	25-150				
Surrogate: d5-N-EtFOSAA	89.7		"	83.3		108	25-150				
Surrogate: M2-6:2 FTS	125		"	79.2		158	25-200				
Surrogate: M2-8:2 FTS	117		"	80.0		146	25-200				
Surrogate: M9PFNA	23.7		"	20.8		114	25-150				
Surrogate: M2-4:2 FTS	124		"	78.2		159	25-150				
Surrogate: d-N-MeFOSA	28.7		"	41.7		68.9	25-150				
Surrogate: d-N-EtFOSA	24.4		"	41.7		58.5	25-150				
Surrogate: M3HFPO-DA	219		"	167		131	25-150				
Surrogate: d9-N-EtFOSE	145		"	417		34.8	25-150				
Surrogate: d7-N-MeFOSE	215		"	417		51.5	25-150				

LCS (BA41229-BS1)

Prepared & Analyzed: 01/19/2024

Perfluorobutanesulfonic acid (PFBS)	74.3	3.54	ng/L	70.8		105	50-150				
Perfluorohexanoic acid (PFHxA)	78.9	4.00	"	80.0		98.6	50-150				
Perfluoroheptanoic acid (PFHpA)	79.1	4.00	"	80.0		98.9	50-150				
Perfluorohexanesulfonic acid (PFHxS)	72.5	3.66	"	73.2		99.0	50-150				
Perfluorooctanoic acid (PFOA)	73.2	4.00	"	80.0		91.5	50-150				
Perfluorooctanesulfonic acid (PFOS)	87.5	3.72	"	74.4		118	50-150				
Perfluorononanoic acid (PFNA)	70.3	4.00	"	80.0		87.9	50-150				
Perfluorodecanoic acid (PFDA)	81.5	4.00	"	80.0		102	50-150				
Perfluoroundecanoic acid (PFUnA)	82.2	4.00	"	80.0		103	50-150				
Perfluorododecanoic acid (PFDoA)	80.4	4.00	"	80.0		101	50-150				
Perfluorotridecanoic acid (PFTriDA)	112	4.00	"	80.0		141	50-150				
Perfluorotetradecanoic acid (PFTA)	67.4	4.00	"	80.0		84.3	50-150				
N-MeFOSAA	82.5	4.00	"	80.0		103	50-150				
N-EtFOSAA	78.1	4.00	"	80.0		97.6	50-150				
Perfluoropentanoic acid (PFPeA)	164	8.00	"	160		102	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	74.9	4.00	"	80.0		93.6	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	90.1	3.82	"	76.4		118	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	75.5	3.86	"	77.2		97.8	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	318	15.2	"	304		105	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	331	15.4	"	307		108	50-150				
Perfluoro-n-butanoic acid (PFBA)	327	16.0	"	320		102	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	161	7.12	"	142		113	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	181	8.00	"	160		113	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	123	8.00	"	160		76.7	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	166	8.00	"	160		104	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	73.3	3.76	"	75.2		97.6	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	291	15.0	"	300		97.1	50-150				
HFPO-DA (Gen-X)	148	16.0	"	160		92.3	50-150				
11CL-PF3OUdS	138	15.1	"	151		91.4	50-150				
9CL-PF3ONS	179	15.0	"	150		120	50-150				
ADONA	164	15.1	"	151		108	50-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

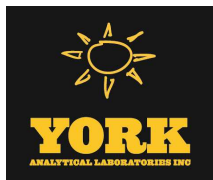
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41229 - EPA 1633 Prep

LCS (BA41229-BS1)

Prepared & Analyzed: 01/19/2024

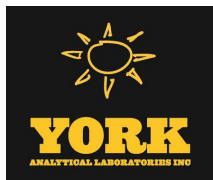
Perfluorododecanesulfonic acid (PFDoS)	49.0	3.88	ng/L	77.6		63.2	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	103	3.84	"	76.8		135	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	276	10.0	"	320		86.2	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1500	50.0	"	1600		93.8	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1360	50.0	"	1600		84.8	50-150				
N-MeFOSE	800	40.0	"	800		100	50-150				
N-MeFOSA	88.7	4.00	"	80.0		111	50-150				
N-EtFOSE	981	40.0	"	800		123	50-150				
N-EtFOSA	121	4.00	"	80.0		151	50-150	High Bias			
Surrogate: M3PFBS	49.3		"	38.8		127	25-150				
Surrogate: M5PFHxA	54.3		"	41.7		130	25-150				
Surrogate: M4PFHpA	51.7		"	41.7		124	25-150				
Surrogate: M3PFHxS	50.9		"	39.5		129	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	53.4		"	41.7		128	25-150				
Surrogate: M6PFDA	23.7		"	20.8		114	25-150				
Surrogate: M7PFUdA	24.0		"	20.8		115	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	21.2		"	20.8		102	25-150				
Surrogate: M2PFTeDA	11.7		"	20.8		56.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	45.7		"	167		27.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	46.0		"	39.9		115	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	104		"	83.3		125	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.5		"	41.7		114	10-150				
Surrogate: d3-N-MeFOSAA	84.9		"	83.3		102	25-150				
Surrogate: d5-N-EtFOSAA	88.1		"	83.3		106	25-150				
Surrogate: M2-6:2 FTS	108		"	79.2		136	25-200				
Surrogate: M2-8:2 FTS	129		"	80.0		161	25-200				
Surrogate: M9PFNA	27.7		"	20.8		133	25-150				
Surrogate: M2-4:2 FTS	126		"	78.2		162	25-150				
Surrogate: d-N-MeFOSA	32.1		"	41.7		77.1	25-150				
Surrogate: d-N-EtFOSA	23.1		"	41.7		55.5	25-150				
Surrogate: M3HFPO-DA	231		"	167		138	25-150				
Surrogate: d9-N-EtFOSE	159		"	417		38.0	25-150				
Surrogate: d7-N-MeFOSE	239		"	417		57.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA41229 - EPA 1633 Prep											
LCS (BA41229-BS2)						Prepared & Analyzed: 01/19/2024					
Perfluorobutanesulfonic acid (PFBS)	14.0	3.54	ng/L	14.2		98.6	50-150				
Perfluorohexanoic acid (PFHxA)	14.8	4.00	"	16.0		92.7	50-150				
Perfluoroheptanoic acid (PFHpA)	16.1	4.00	"	16.0		101	50-150				
Perfluorohexanesulfonic acid (PFHxS)	15.5	3.66	"	14.6		106	50-150				
Perfluorooctanoic acid (PFOA)	15.0	4.00	"	16.0		94.0	50-150				
Perfluorooctanesulfonic acid (PFOS)	19.5	3.72	"	14.9		131	50-150				
Perfluorononanoic acid (PFNA)	17.4	4.00	"	16.0		109	50-150				
Perfluorodecanoic acid (PFDA)	16.1	4.00	"	16.0		101	50-150				
Perfluoroundecanoic acid (PFUnA)	16.2	4.00	"	16.0		101	50-150				
Perfluorododecanoic acid (PFDoA)	15.8	4.00	"	16.0		98.8	50-150				
Perfluorotridecanoic acid (PFTriDA)	25.4	4.00	"	16.0		159	50-150	High Bias			
Perfluorotetradecanoic acid (PFTA)	17.9	4.00	"	16.0		112	50-150				
N-MeFOSAA	15.0	4.00	"	16.0		93.6	50-150				
N-EtFOSAA	18.0	4.00	"	16.0		113	50-150				
Perfluoropentanoic acid (PFPeA)	32.0	8.00	"	32.0		100	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	17.9	4.00	"	16.0		112	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	17.4	3.82	"	15.3		114	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	12.6	3.86	"	15.4		81.6	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	58.9	15.2	"	60.8		96.9	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	68.7	15.4	"	61.4		112	50-150				
Perfluoro-n-butanoic acid (PFBA)	55.0	16.0	"	64.0		85.9	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	30.9	7.12	"	28.5		109	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	33.5	8.00	"	32.0		105	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	2.84	8.00	"	32.0		8.89	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	36.5	8.00	"	32.0		114	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	15.6	3.76	"	15.0		104	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	65.3	15.0	"	60.0		109	50-150				
HFPO-DA (Gen-X)	33.8	16.0	"	32.0		106	50-150				
11CL-PF3OUdS	24.5	15.1	"	30.2		81.0	50-150				
9CL-PF3ONS	35.8	15.0	"	29.9		120	50-150				
ADONA	33.6	15.1	"	30.2		111	50-150				
Perfluorododecanesulfonic acid (PFDoS)	7.01	3.88	"	15.5		45.1	50-150	Low Bias			
Perfluoro-1-nonanesulfonic acid (PFNS)	19.8	3.84	"	15.4		129	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	35.9	10.0	"	64.0		56.1	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	282	50.0	"	320		88.3	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	265	50.0	"	320		82.8	50-150				
N-MeFOSE	186	40.0	"	160		116	50-150				
N-MeFOSA	17.3	4.00	"	16.0		108	50-150				
N-EtFOSE	213	40.0	"	160		133	50-150				
N-EtFOSA	28.6	4.00	"	16.0		179	50-150	High Bias			
Surrogate: M3PFBS	64.2		"	38.8		166	25-150				
Surrogate: M5PFHxA	65.5		"	41.7		157	25-150				
Surrogate: M4PFHpA	62.4		"	41.7		150	25-150				
Surrogate: M3PFHxS	65.4		"	39.5		166	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	60.5		"	41.7		145	25-150				
Surrogate: M6PFDA	30.4		"	20.8		146	25-150				
Surrogate: M7PFUdA	31.3		"	20.8		150	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	24.2		"	20.8		116	25-150				
Surrogate: M2PFTeDA	10.4		"	20.8		50.1	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41229 - EPA 1633 Prep

LCS (BA41229-BS2)

Prepared & Analyzed: 01/19/2024

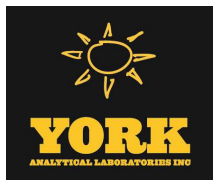
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	8.92		ng/L	167		5.34	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	60.6		"	39.9		152	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	113		"	83.3		136	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	53.3		"	41.7		128	10-150				
Surrogate: d3-N-MeFOSAA	99.0		"	83.3		119	25-150				
Surrogate: d5-N-EtFOSAA	98.7		"	83.3		119	25-150				
Surrogate: M2-6:2 FTS	143		"	79.2		181	25-200				
Surrogate: M2-8:2 FTS	146		"	80.0		182	25-200				
Surrogate: M9PFNA	31.0		"	20.8		149	25-150				
Surrogate: M2-4:2 FTS	155		"	78.2		198	25-150				
Surrogate: d-N-MeFOSA	29.9		"	41.7		71.6	25-150				
Surrogate: d-N-EtFOSA	22.6		"	41.7		54.2	25-150				
Surrogate: M3HFPO-DA	265		"	167		159	25-150				
Surrogate: d9-N-EtFOSE	158		"	417		37.9	25-150				
Surrogate: d7-N-MeFOSE	236		"	417		56.6	25-150				

Batch BA41789 - EPA 1633 Prep

Blank (BA41789-BLK1)

Prepared: 01/27/2024 Analyzed: 01/29/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L	
Perfluorohexanoic acid (PFHxA)	ND	4.00	"	
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"	
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"	
Perfluorooctanoic acid (PFOA)	ND	4.00	"	
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"	
Perfluorononanoic acid (PFNA)	ND	4.00	"	
Perfluorodecanoic acid (PFDA)	ND	4.00	"	
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"	
Perfluorododecanoic acid (PFDoA)	ND	4.00	"	
Perfluorotridecanoic acid (PFTriDA)	ND	4.00	"	
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"	
N-MeFOSAA	ND	4.00	"	
N-EtFOSAA	ND	4.00	"	
Perfluoropentanoic acid (PFPeA)	0.557	8.00	"	
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"	
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"	
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.4	"	
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	7.12	"	
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	8.00	"	
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"	
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"	
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"	
HFPO-DA (Gen-X)	ND	16.0	"	
11CL-PF3OUdS	ND	15.1	"	



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

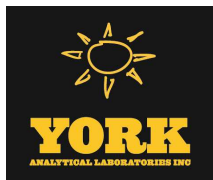
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41789 - EPA 1633 Prep

Blank (BA41789-BLK1)

Prepared: 01/27/2024 Analyzed: 01/29/2024

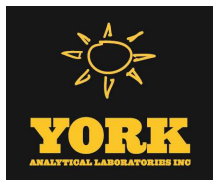
9CL-PF3ONS	ND	15.0	ng/L								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	40.9		"	38.8		105	25-150				
Surrogate: M5PFHxA	48.1		"	41.7		115	25-150				
Surrogate: M4PFHpA	47.9		"	41.7		115	25-150				
Surrogate: M3PFHxS	48.0		"	39.5		121	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	52.1		"	41.7		125	25-150				
Surrogate: M6PFDA	26.5		"	20.8		127	25-150				
Surrogate: M7PFUdA	24.1		"	20.8		116	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	22.6		"	20.8		109	25-150				
Surrogate: M2PFTeDA	14.2		"	20.8		68.4	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	1.41		"	167		0.846	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	49.7		"	39.9		124	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	8.10		"	83.3		9.73	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	48.9		"	41.7		117	10-150				
Surrogate: d3-N-MeFOSAA	90.8		"	83.3		109	25-150				
Surrogate: d5-N-EtFOSAA	98.3		"	83.3		118	25-150				
Surrogate: M2-6:2 FTS	96.7		"	79.2		122	25-200				
Surrogate: M2-8:2 FTS	90.9		"	80.0		114	25-200				
Surrogate: M9PFNA	24.1		"	20.8		116	25-150				
Surrogate: M2-4:2 FTS	95.9		"	78.2		123	25-150				
Surrogate: d-N-MeFOSA	38.5		"	41.7		92.3	25-150				
Surrogate: d-N-EtFOSA	27.9		"	41.7		66.8	25-150				
Surrogate: M3HFPO-DA	182		"	167		109	25-150				
Surrogate: d9-N-EtFOSE	269		"	417		64.5	25-150				
Surrogate: d7-N-MeFOSE	311		"	417		74.5	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BA41789 - EPA 1633 Prep											
LCS (BA41789-BS1)						Prepared: 01/27/2024 Analyzed: 01/29/2024					
Perfluorobutanesulfonic acid (PFBS)	60.7	3.54	ng/L	70.8		85.7	50-150				
Perfluorohexanoic acid (PFHxA)	72.2	4.00	"	80.0		90.2	50-150				
Perfluoroheptanoic acid (PFHpA)	72.7	4.00	"	80.0		90.9	50-150				
Perfluorohexanesulfonic acid (PFHxS)	69.2	3.66	"	73.2		94.5	50-150				
Perfluorooctanoic acid (PFOA)	56.3	4.00	"	80.0		70.4	50-150				
Perfluorooctanesulfonic acid (PFOS)	73.1	3.72	"	74.4		98.3	50-150				
Perfluorononanoic acid (PFNA)	69.0	4.00	"	80.0		86.2	50-150				
Perfluorodecanoic acid (PFDA)	69.1	4.00	"	80.0		86.4	50-150				
Perfluoroundecanoic acid (PFUnA)	68.8	4.00	"	80.0		86.0	50-150				
Perfluorododecanoic acid (PFDoA)	69.6	4.00	"	80.0		87.0	50-150				
Perfluorotridecanoic acid (PFTriDA)	110	4.00	"	80.0		137	50-150				
Perfluorotetradecanoic acid (PFTA)	82.0	4.00	"	80.0		102	50-150				
N-MeFOSAA	68.4	4.00	"	80.0		85.5	50-150				
N-EtFOSAA	81.5	4.00	"	80.0		102	50-150				
Perfluoropentanoic acid (PFPeA)	143	8.00	"	160		89.5	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	73.1	4.00	"	80.0		91.4	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	76.1	3.82	"	76.4		99.6	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	60.2	3.86	"	77.2		78.0	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	265	15.2	"	304		87.2	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	280	15.4	"	307		91.0	50-150				
Perfluoro-n-butanoic acid (PFBA)	85.8	16.0	"	320		26.8	50-150	Low Bias			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	158	7.12	"	142		111	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	88.5	8.00	"	160		55.3	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	9.12	8.00	"	160		5.70	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	366	8.00	"	160		229	50-150	High Bias			
Perfluoro-1-pentanesulfonate (PFPeS)	72.7	3.76	"	75.2		96.6	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	256	15.0	"	300		85.2	50-150				
HFPO-DA (Gen-X)	129	16.0	"	160		80.5	50-150				
11CL-PF3OUdS	140	15.1	"	151		92.6	50-150				
9CL-PF3ONS	199	15.0	"	150		133	50-150				
ADONA	205	15.1	"	151		135	50-150				
Perfluorododecanesulfonic acid (PFDoS)	28.9	3.88	"	77.6		37.2	50-150	Low Bias			
Perfluoro-1-nonanesulfonic acid (PFNS)	68.4	3.84	"	76.8		89.1	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	81.1	10.0	"	320		25.4	50-150	Low Bias			
3-Perfluoropentyl propanoic acid (FPePA)	1850	50.0	"	1600		116	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	2230	50.0	"	1600		139	50-150				
N-MeFOSE	644	40.0	"	800		80.5	50-150				
N-MeFOSA	63.5	4.00	"	80.0		79.4	50-150				
N-EtFOSE	667	40.0	"	800		83.4	50-150				
N-EtFOSA	77.6	4.00	"	80.0		97.0	50-150				
Surrogate: M3PFBS	32.1		"	38.8		82.6	25-150				
Surrogate: M5PFHxA	36.1		"	41.7		86.6	25-150				
Surrogate: M4PFHpA	48.8		"	41.7		117	25-150				
Surrogate: M3PFHxS	47.0		"	39.5		119	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	54.2		"	41.7		130	25-150				
Surrogate: M6PFDA	25.3		"	20.8		122	25-150				
Surrogate: M7PFUdA	26.0		"	20.8		125	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	20.8		"	20.8		99.9	25-150				
Surrogate: M2PFTeDA	9.09		"	20.8		43.7	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BA41789 - EPA 1633 Prep

LCS (BA41789-BS1)

Prepared: 01/27/2024 Analyzed: 01/29/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	1.45		ng/L	167		0.868	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	45.7		"	39.9		115	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	6.68		"	83.3		8.02	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.0		"	41.7		117	10-150				
Surrogate: d3-N-MeFOSAA	73.9		"	83.3		88.8	25-150				
Surrogate: d5-N-EtFOSAA	73.8		"	83.3		88.6	25-150				
Surrogate: M2-6:2 FTS	94.9		"	79.2		120	25-200				
Surrogate: M2-8:2 FTS	88.1		"	80.0		110	25-200				
Surrogate: M9PFNA	27.0		"	20.8		130	25-150				
Surrogate: M2-4:2 FTS	73.5		"	78.2		94.1	25-150				
Surrogate: d-N-MeFOSA	35.7		"	41.7		85.5	25-150				
Surrogate: d-N-EtFOSA	22.8		"	41.7		54.6	25-150				
Surrogate: M3HFPO-DA	139		"	167		83.3	25-150				
Surrogate: d9-N-EtFOSE	115		"	417		27.5	25-150				
Surrogate: d7-N-MeFOSE	175		"	417		41.9	25-150				

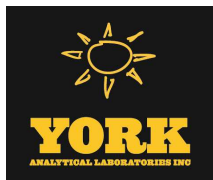
LCS (BA41789-BS2)

Prepared: 01/27/2024 Analyzed: 01/29/2024

Perfluorobutanesulfonic acid (PFBS)	13.2	3.54	ng/L	14.2		92.9	50-150				
Perfluorohexanoic acid (PFHxA)	14.2	4.00	"	16.0		88.7	50-150				
Perfluoroheptanoic acid (PFHpA)	13.6	4.00	"	16.0		85.3	50-150				
Perfluorohexanesulfonic acid (PFHxS)	13.9	3.66	"	14.6		95.2	50-150				
Perfluorooctanoic acid (PFOA)	13.3	4.00	"	16.0		83.0	50-150				
Perfluorooctanesulfonic acid (PFOS)	13.9	3.72	"	14.9		93.4	50-150				
Perfluorononanoic acid (PFNA)	13.6	4.00	"	16.0		84.9	50-150				
Perfluorodecanoic acid (PFDA)	13.9	4.00	"	16.0		86.8	50-150				
Perfluoroundecanoic acid (PFUnA)	15.7	4.00	"	16.0		98.0	50-150				
Perfluorododecanoic acid (PFDoA)	15.4	4.00	"	16.0		96.0	50-150				
Perfluorotridecanoic acid (PFTTrDA)	15.8	4.00	"	16.0		98.9	50-150				
Perfluorotetradecanoic acid (PFTA)	15.6	4.00	"	16.0		97.5	50-150				
N-MeFOSAA	13.8	4.00	"	16.0		86.5	50-150				
N-EtFOSAA	17.4	4.00	"	16.0		109	50-150				
Perfluoropentanoic acid (PFPeA)	27.9	8.00	"	32.0		87.1	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	15.9	4.00	"	16.0		99.6	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	14.1	3.82	"	15.3		92.0	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	12.3	3.86	"	15.4		79.3	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	55.9	15.2	"	60.8		91.9	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	56.4	15.4	"	61.4		91.9	50-150				
Perfluoro-n-butanoic acid (PFBA)	38.0	16.0	"	64.0		59.4	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	28.9	7.12	"	28.5		102	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	35.5	8.00	"	32.0		111	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	2.67	8.00	"	32.0		8.34	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	39.6	8.00	"	32.0		124	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	14.6	3.76	"	15.0		97.0	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	51.7	15.0	"	60.0		86.2	50-150				
HFPO-DA (Gen-X)	25.2	16.0	"	32.0		78.8	50-150				
11CL-PF3OUdS	19.3	15.1	"	30.2		63.7	50-150				
9CL-PF3ONS	26.3	15.0	"	29.9		87.9	50-150				
ADONA	25.1	15.1	"	30.2		82.9	50-150				

Low Bias





PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

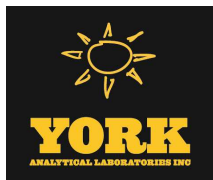
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41789 - EPA 1633 Prep

LCS (BA41789-BS2)

Prepared: 01/27/2024 Analyzed: 01/29/2024

Perfluorododecanesulfonic acid (PFDoS)	8.57	3.88	ng/L	15.5		55.2	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	15.3	3.84	"	15.4		99.7	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	29.2	10.0	"	64.0		45.6	50-150	Low Bias			
3-Perfluoropentyl propanoic acid (FPePA)	273	50.0	"	320		85.4	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	301	50.0	"	320		94.0	50-150				
N-MeFOSE	144	40.0	"	160		89.8	50-150				
N-MeFOSA	17.0	4.00	"	16.0		106	50-150				
N-EtFOSE	157	40.0	"	160		98.0	50-150				
N-EtFOSA	12.5	4.00	"	16.0		78.0	50-150				
Surrogate: M3PFBS	43.5		"	38.8		112	25-150				
Surrogate: M5PFHxA	50.8		"	41.7		122	25-150				
Surrogate: M4PFHpA	50.7		"	41.7		122	25-150				
Surrogate: M3PFHxS	45.3		"	39.5		115	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	47.4		"	41.7		114	25-150				
Surrogate: M6PFDA	24.8		"	20.8		119	25-150				
Surrogate: M7PFUdA	24.1		"	20.8		116	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	20.6		"	20.8		98.9	25-150				
Surrogate: M2PFTeDA	14.8		"	20.8		71.0	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	2.73		"	167		1.63	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	48.0		"	39.9		120	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	69.9		"	83.3		83.9	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	50.2		"	41.7		120	10-150				
Surrogate: d3-N-MeFOSAA	89.8		"	83.3		108	25-150				
Surrogate: d5-N-EtFOSAA	89.6		"	83.3		108	25-150				
Surrogate: M2-6:2 FTS	84.9		"	79.2		107	25-200				
Surrogate: M2-8:2 FTS	86.0		"	80.0		107	25-200				
Surrogate: M9PFNA	26.8		"	20.8		129	25-150				
Surrogate: M2-4:2 FTS	94.2		"	78.2		120	25-150				
Surrogate: d-N-MeFOSA	38.5		"	41.7		92.2	25-150				
Surrogate: d-N-EtFOSA	37.4		"	41.7		89.6	25-150				
Surrogate: M3HFPO-DA	228		"	167		137	25-150				
Surrogate: d9-N-EtFOSE	192		"	417		46.1	25-150				
Surrogate: d7-N-MeFOSE	275		"	417		66.0	25-150				



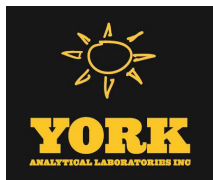
PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BA41789 - EPA 1633 Prep

Duplicate (BA41789-DUP1)		*Source sample: 24A1057-04 (DUP)				Prepared: 01/27/2024 Analyzed: 01/29/2024					
Perfluorobutanesulfonic acid (PFBS)	7.60	1.78	ng/L		7.23				5.04	30	
Perfluorohexanoic acid (PFHxA)	5.37	2.01	"		4.94				8.38	30	
Perfluoroheptanoic acid (PFHpA)	5.01	2.01	"		5.01				0.105	30	
Perfluorohexanesulfonic acid (PFHxS)	3.74	1.84	"		3.48				7.11	30	
Perfluorooctanoic acid (PFOA)	12.2	2.01	"		14.0				14.2	30	
Perfluorooctanesulfonic acid (PFOS)	26.4	1.87	"		24.3				8.19	30	
Perfluorononanoic acid (PFNA)	0.781	2.01	"		ND					30	
Perfluorodecanoic acid (PFDA)	ND	2.01	"		ND					30	
Perfluoroundecanoic acid (PFUnA)	ND	2.01	"		ND					30	
Perfluorododecanoic acid (PFDoA)	ND	2.01	"		ND					30	
Perfluorotridecanoic acid (PFTrDA)	0.814	2.01	"		ND					30	
Perfluorotetradecanoic acid (PFTA)	ND	2.01	"		ND					30	
N-MeFOSAA	ND	2.01	"		ND					30	
N-EtFOSAA	ND	2.01	"		ND					30	
Perfluoropentanoic acid (PFPeA)	5.72	4.03	"		5.31				7.44	30	
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.01	"		ND					30	
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.92	"		ND					30	
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.94	"		ND					30	
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	7.65	"		ND					30	
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	7.73	"		ND					30	
Perfluoro-n-butanoic acid (PFBA)	ND	8.05	"		11.5					30	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND	3.58	"		ND					30	
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	4.03	"		ND					30	
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	4.03	"		ND					30	
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	4.03	"		ND					30	
Perfluoro-1-pentanesulfonate (PFPeS)	0.874	1.89	"		1.03				16.2	30	
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	7.55	"		ND					30	
HFPO-DA (Gen-X)	ND	8.05	"		ND					30	
11CL-PF3OUdS	ND	7.61	"		ND					30	
9CL-PF3ONS	ND	7.53	"		ND					30	
ADONA	ND	7.61	"		ND					30	
Perfluorododecanesulfonic acid (PFDoS)	ND	1.95	"		ND					30	
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	1.93	"		ND					30	
3-Perfluoropropyl propanoic acid (FPrPA)	ND	5.03	"		ND					30	
3-Perfluoropentyl propanoic acid (FPePA)	ND	25.2	"		ND					30	
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	25.2	"		ND					30	
N-MeFOSE	6.99	20.1	"		ND					30	
N-MeFOSA	ND	2.01	"		ND					30	
N-EtFOSE	10.4	20.1	"		ND					30	
N-EtFOSA	ND	2.01	"		ND					30	
Surrogate: M3PFBS	21.9		"	19.5		112	25-150				
Surrogate: M5PFHxA	26.1		"	21.0		124	25-150				
Surrogate: M4PFHpA	22.1		"	21.0		105	25-150				
Surrogate: M3PFHxS	23.6		"	19.9		119	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	25.2		"	21.0		120	25-150				
Surrogate: M6PFDA	10.2		"	10.5		97.3	25-150				
Surrogate: M7PFUdA	8.93		"	10.5		85.3	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	8.41		"	10.5		80.3	25-150				
Surrogate: M2PFTeDA	5.88		"	10.5		56.2	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

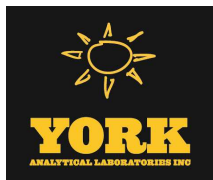
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BA41789 - EPA 1633 Prep

Duplicate (BA41789-DUP1)		*Source sample: 24A1057-04 (DUP)					Prepared: 01/27/2024 Analyzed: 01/29/2024				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	1.30		ng/L	84.0		1.54	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	20.4		"	20.1		102	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	33.3		"	41.9		79.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	22.5		"	21.0		107	10-150				
Surrogate: d3-N-MeFOSAA	31.0		"	41.9		74.1	25-150				
Surrogate: d5-N-EtFOSAA	29.9		"	41.9		71.4	25-150				
Surrogate: M2-6:2 FTS	45.7		"	39.9		115	25-200				
Surrogate: M2-8:2 FTS	34.4		"	40.3		85.4	25-200				
Surrogate: M9PFNA	11.2		"	10.5		107	25-150				
Surrogate: M2-4:2 FTS	58.8		"	39.3		149	25-150				
Surrogate: d-N-MeFOSA	15.9		"	21.0		75.8	25-150				
Surrogate: d-N-EtFOSA	15.5		"	21.0		74.1	25-150				
Surrogate: M3HFPO-DA	102		"	84.0		121	25-150				
Surrogate: d9-N-EtFOSE	81.8		"	210		39.0	25-150				
Surrogate: d7-N-MeFOSE	100		"	210		47.7	25-150				

Batch BB40180 - EPA 1633 Prep

Blank (BB40180-BLK1)		Prepared: 02/03/2024 Analyzed: 02/05/2024									
Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	4.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"								
Perfluorooctanoic acid (PFOA)	ND	4.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"								
Perfluorononanoic acid (PFNA)	ND	4.00	"								
Perfluorodecanoic acid (PFDA)	ND	4.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"								
Perfluorododecanoic acid (PFDoA)	ND	4.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	4.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"								
N-MeFOSAA	ND	4.00	"								
N-EtFOSAA	ND	4.00	"								
Perfluoropentanoic acid (PFPeA)	ND	8.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.4	"								
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	7.12	"								
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	8.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"								
HFPO-DA (Gen-X)	ND	16.0	"								
11CL-PF3OUdS	ND	15.1	"								



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

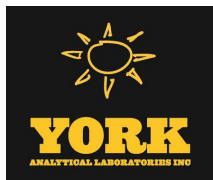
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40180 - EPA 1633 Prep

Blank (BB40180-BLK1)

Prepared: 02/03/2024 Analyzed: 02/05/2024

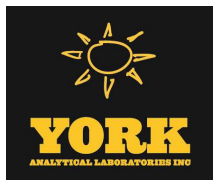
9CL-PF3ONS	ND	15.0	ng/L								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	49.2		"	38.8		127	25-150				
Surrogate: M5PFHxA	49.2		"	41.7		118	25-150				
Surrogate: M4PFHpA	45.8		"	41.7		110	25-150				
Surrogate: M3PFHxS	49.8		"	39.5		126	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	49.2		"	41.7		118	25-150				
Surrogate: M6PFDA	24.0		"	20.8		115	25-150				
Surrogate: M7PFUdA	25.9		"	20.8		124	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	25.9		"	20.8		124	25-150				
Surrogate: M2PFTeDA	14.9		"	20.8		71.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.23		"	167		1.94	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	44.6		"	39.9		112	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	78.8		"	83.3		94.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	49.5		"	41.7		119	10-150				
Surrogate: d3-N-MeFOSAA	69.6		"	83.3		83.5	25-150				
Surrogate: d5-N-EtFOSAA	82.5		"	83.3		99.0	25-150				
Surrogate: M2-6:2 FTS	62.5		"	79.2		78.9	25-200				
Surrogate: M2-8:2 FTS	66.2		"	80.0		82.7	25-200				
Surrogate: M9PFNA	27.1		"	20.8		130	25-150				
Surrogate: M2-4:2 FTS	74.0		"	78.2		94.6	25-150				
Surrogate: d-N-MeFOSA	38.0		"	41.7		91.2	25-150				
Surrogate: d-N-EtFOSA	35.4		"	41.7		84.9	25-150				
Surrogate: M3HFPO-DA	216		"	167		129	25-150				
Surrogate: d9-N-EtFOSE	160		"	417		38.3	25-150				
Surrogate: d7-N-MeFOSE	216		"	417		51.8	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40180 - EPA 1633 Prep											
LCS (BB40180-BS1)						Prepared: 02/03/2024 Analyzed: 02/05/2024					
Perfluorobutanesulfonic acid (PFBS)	74.0	3.54	ng/L	70.8		105	50-150				
Perfluorohexanoic acid (PFHxA)	80.7	4.00	"	80.0		101	50-150				
Perfluoroheptanoic acid (PFHpA)	86.1	4.00	"	80.0		108	50-150				
Perfluorohexanesulfonic acid (PFHxS)	76.8	3.66	"	73.2		105	50-150				
Perfluorooctanoic acid (PFOA)	76.3	4.00	"	80.0		95.4	50-150				
Perfluorooctanesulfonic acid (PFOS)	79.4	3.72	"	74.4		107	50-150				
Perfluorononanoic acid (PFNA)	77.9	4.00	"	80.0		97.4	50-150				
Perfluorodecanoic acid (PFDA)	76.3	4.00	"	80.0		95.4	50-150				
Perfluoroundecanoic acid (PFUnA)	89.6	4.00	"	80.0		112	50-150				
Perfluorododecanoic acid (PFDoA)	79.4	4.00	"	80.0		99.2	50-150				
Perfluorotridecanoic acid (PFTriDA)	121	4.00	"	80.0		152	50-150	High Bias			
Perfluorotetradecanoic acid (PFTA)	92.8	4.00	"	80.0		116	50-150				
N-MeFOSAA	86.2	4.00	"	80.0		108	50-150				
N-EtFOSAA	89.0	4.00	"	80.0		111	50-150				
Perfluoropentanoic acid (PFPeA)	165	8.00	"	160		103	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	86.1	4.00	"	80.0		108	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	82.4	3.82	"	76.4		108	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	76.0	3.86	"	77.2		98.5	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	320	15.2	"	304		105	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	313	15.4	"	307		102	50-150				
Perfluoro-n-butanoic acid (PFBA)	240	16.0	"	320		74.9	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	163	7.12	"	142		115	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	137	8.00	"	160		85.8	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	14.0	8.00	"	160		8.75	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	197	8.00	"	160		123	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	84.7	3.76	"	75.2		113	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	316	15.0	"	300		105	50-150				
HFPO-DA (Gen-X)	142	16.0	"	160		89.1	50-150				
11CL-PF3OUdS	111	15.1	"	151		73.4	50-150				
9CL-PF3ONS	137	15.0	"	150		91.4	50-150				
ADONA	133	15.1	"	151		87.7	50-150				
Perfluorododecanesulfonic acid (PFDoS)	41.4	3.88	"	77.6		53.3	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	82.0	3.84	"	76.8		107	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	179	10.0	"	320		55.8	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1470	50.0	"	1600		91.8	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1620	50.0	"	1600		101	50-150				
N-MeFOSE	757	40.0	"	800		94.6	50-150				
N-MeFOSA	83.3	4.00	"	80.0		104	50-150				
N-EtFOSE	838	40.0	"	800		105	50-150				
N-EtFOSA	75.5	4.00	"	80.0		94.4	50-150				
Surrogate: M3PFBS	42.7		"	38.8		110	25-150				
Surrogate: M5PFHxA	48.6		"	41.7		117	25-150				
Surrogate: M4PFHpA	45.2		"	41.7		108	25-150				
Surrogate: M3PFHxS	43.6		"	39.5		110	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	43.7		"	41.7		105	25-150				
Surrogate: M6PFDA	22.2		"	20.8		107	25-150				
Surrogate: M7PFUdA	21.6		"	20.8		104	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	22.0		"	20.8		106	25-150				
Surrogate: M2PFTeDA	12.1		"	20.8		58.0	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40180 - EPA 1633 Prep

LCS (BB40180-BS1)

Prepared: 02/03/2024 Analyzed: 02/05/2024

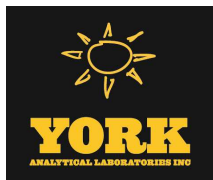
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	2.90		ng/L	167		1.74	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	45.7		"	39.9		115	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	78.7		"	83.3		94.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	48.3		"	41.7		116	10-150				
Surrogate: d3-N-MeFOSAA	66.6		"	83.3		79.9	25-150				
Surrogate: d5-N-EtFOSAA	68.0		"	83.3		81.7	25-150				
Surrogate: M2-6:2 FTS	60.5		"	79.2		76.3	25-200				
Surrogate: M2-8:2 FTS	62.7		"	80.0		78.4	25-200				
Surrogate: M9PFNA	23.1		"	20.8		111	25-150				
Surrogate: M2-4:2 FTS	67.9		"	78.2		86.8	25-150				
Surrogate: d-N-MeFOSA	40.3		"	41.7		96.6	25-150				
Surrogate: d-N-EtFOSA	36.2		"	41.7		86.9	25-150				
Surrogate: M3HFPO-DA	226		"	167		135	25-150				
Surrogate: d9-N-EtFOSE	202		"	417		48.5	25-150				
Surrogate: d7-N-MeFOSE	282		"	417		67.7	25-150				

LCS (BB40180-BS2)

Prepared: 02/03/2024 Analyzed: 02/05/2024

Perfluorobutanesulfonic acid (PFBS)	15.0	3.54	ng/L	14.2		106	50-150				
Perfluorohexanoic acid (PFHxA)	17.7	4.00	"	16.0		110	50-150				
Perfluoroheptanoic acid (PFHpA)	17.3	4.00	"	16.0		108	50-150				
Perfluorohexanesulfonic acid (PFHxS)	18.0	3.66	"	14.6		123	50-150				
Perfluorooctanoic acid (PFOA)	15.6	4.00	"	16.0		97.5	50-150				
Perfluorooctanesulfonic acid (PFOS)	18.6	3.72	"	14.9		125	50-150				
Perfluorononanoic acid (PFNA)	17.3	4.00	"	16.0		108	50-150				
Perfluorodecanoic acid (PFDA)	15.2	4.00	"	16.0		94.7	50-150				
Perfluoroundecanoic acid (PFUnA)	17.6	4.00	"	16.0		110	50-150				
Perfluorododecanoic acid (PFDoA)	18.2	4.00	"	16.0		114	50-150				
Perfluorotridecanoic acid (PFTTrDA)	18.5	4.00	"	16.0		116	50-150				
Perfluorotetradecanoic acid (PFTA)	17.0	4.00	"	16.0		106	50-150				
N-MeFOSAA	15.9	4.00	"	16.0		99.2	50-150				
N-EtFOSAA	18.6	4.00	"	16.0		116	50-150				
Perfluoropentanoic acid (PFPeA)	34.6	8.00	"	32.0		108	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	20.5	4.00	"	16.0		128	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	17.0	3.82	"	15.3		111	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	15.1	3.86	"	15.4		97.6	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	71.0	15.2	"	60.8		117	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	76.7	15.4	"	61.4		125	50-150				
Perfluoro-n-butanoic acid (PFBA)	62.6	16.0	"	64.0		97.8	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	36.6	7.12	"	28.5		128	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	29.7	8.00	"	32.0		93.0	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	4.31	8.00	"	32.0		13.5	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	39.9	8.00	"	32.0		125	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	18.1	3.76	"	15.0		120	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	63.2	15.0	"	60.0		105	50-150				
HFPO-DA (Gen-X)	30.6	16.0	"	32.0		95.6	50-150				
11CL-PF3OUdS	25.9	15.1	"	30.2		85.6	50-150				
9CL-PF3ONS	30.4	15.0	"	29.9		102	50-150				
ADONA	28.1	15.1	"	30.2		92.9	50-150				

Low Bias



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

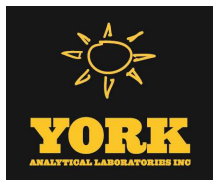
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40180 - EPA 1633 Prep

LCS (BB40180-BS2)

Prepared: 02/03/2024 Analyzed: 02/05/2024

Perfluorododecanesulfonic acid (PFDoS)	11.3	3.88	ng/L	15.5		72.5	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	21.5	3.84	"	15.4		140	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	40.4	10.0	"	64.0		63.2	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	322	50.0	"	320		101	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	382	50.0	"	320		119	50-150				
N-MeFOSE	164	40.0	"	160		103	50-150				
N-MeFOSA	16.2	4.00	"	16.0		101	50-150				
N-EtFOSE	170	40.0	"	160		106	50-150				
N-EtFOSA	17.0	4.00	"	16.0		106	50-150				
Surrogate: M3PFBS	46.2		"	38.8		119	25-150				
Surrogate: M5PFHxA	48.3		"	41.7		116	25-150				
Surrogate: M4PFHpA	50.1		"	41.7		120	25-150				
Surrogate: M3PFHxS	45.6		"	39.5		115	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	52.2		"	41.7		125	25-150				
Surrogate: M6PFDA	26.8		"	20.8		129	25-150				
Surrogate: M7PFUdA	29.6		"	20.8		143	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	28.1		"	20.8		135	25-150				
Surrogate: M2PFTeDA	21.5		"	20.8		103	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.91		"	167		2.94	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	45.0		"	39.9		113	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	86.7		"	83.3		104	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.4		"	41.7		114	10-150				
Surrogate: d3-N-MeFOSAA	76.5		"	83.3		91.9	25-150				
Surrogate: d5-N-EtFOSAA	84.2		"	83.3		101	25-150				
Surrogate: M2-6:2 FTS	63.5		"	79.2		80.2	25-200				
Surrogate: M2-8:2 FTS	59.3		"	80.0		74.2	25-200				
Surrogate: M9PFNA	23.8		"	20.8		114	25-150				
Surrogate: M2-4:2 FTS	74.4		"	78.2		95.2	25-150				
Surrogate: d-N-MeFOSA	38.1		"	41.7		91.4	25-150				
Surrogate: d-N-EtFOSA	34.6		"	41.7		83.0	25-150				
Surrogate: M3HFPO-DA	226		"	167		136	25-150				
Surrogate: d9-N-EtFOSE	214		"	417		51.3	25-150				
Surrogate: d7-N-MeFOSE	264		"	417		63.2	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

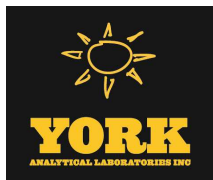
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40651 - EPA 1633 Prep

Blank (BB40651-BLK1)

Prepared: 02/10/2024 Analyzed: 02/12/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	4.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"								
Perfluorooctanoic acid (PFOA)	ND	4.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"								
Perfluorononanoic acid (PFNA)	ND	4.00	"								
Perfluorodecanoic acid (PFDA)	ND	4.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"								
Perfluorododecanoic acid (PFDoA)	ND	4.00	"								
Perfluorotridecanoic acid (PFTriDA)	ND	4.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"								
N-MeFOSAA	ND	4.00	"								
N-EtFOSAA	ND	4.00	"								
Perfluoropentanoic acid (PFPeA)	ND	8.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.4	"								
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	7.12	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	8.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"								
HFPO-DA (Gen-X)	ND	16.0	"								
11CL-PF3OUdS	ND	15.1	"								
9CL-PF3ONS	ND	15.0	"								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	47.0		"	38.8		121	25-150				
Surrogate: M5PFHxA	52.8		"	41.7		127	25-150				
Surrogate: M4PFHpA	47.4		"	41.7		114	25-150				
Surrogate: M3PFHxS	48.9		"	39.5		124	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	52.0		"	41.7		125	25-150				
Surrogate: M6PFDA	24.9		"	20.8		119	25-150				
Surrogate: M7PFUdA	25.3		"	20.8		122	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	21.1		"	20.8		102	25-150				
Surrogate: M2PFTeDA	15.9		"	20.8		76.6	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BB40651 - EPA 1633 Prep

Blank (BB40651-BLK1)

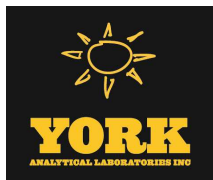
Prepared: 02/10/2024 Analyzed: 02/12/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	82.2		ng/L	167		49.2	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	44.1		"	39.9		110	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	105		"	83.3		126	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	46.9		"	41.7		112	10-150				
Surrogate: d3-N-MeFOSAA	84.4		"	83.3		101	25-150				
Surrogate: d5-N-EtFOSAA	90.4		"	83.3		108	25-150				
Surrogate: M2-6:2 FTS	86.2		"	79.2		109	25-200				
Surrogate: M2-8:2 FTS	92.7		"	80.0		116	25-200				
Surrogate: M9PFNA	23.0		"	20.8		111	25-150				
Surrogate: M2-4:2 FTS	92.8		"	78.2		119	25-150				
Surrogate: d-N-MeFOSA	28.9		"	41.7		69.3	25-150				
Surrogate: d-N-EtFOSA	21.0		"	41.7		50.5	25-150				
Surrogate: M3HFPO-DA	232		"	167		139	25-150				
Surrogate: d9-N-EtFOSE	236		"	417		56.7	25-150				
Surrogate: d7-N-MeFOSE	287		"	417		68.9	25-150				

LCS (BB40651-BS1)

Prepared: 02/10/2024 Analyzed: 02/12/2024

Perfluorobutanesulfonic acid (PFBS)	76.9	3.54	ng/L	70.8		109	50-150				
Perfluorohexanoic acid (PFHxA)	87.7	4.00	"	80.0		110	50-150				
Perfluoroheptanoic acid (PFHpA)	86.1	4.00	"	80.0		108	50-150				
Perfluorohexanesulfonic acid (PFHxS)	82.7	3.66	"	73.2		113	50-150				
Perfluorooctanoic acid (PFOA)	90.9	4.00	"	80.0		114	50-150				
Perfluorooctanesulfonic acid (PFOS)	86.2	3.72	"	74.4		116	50-150				
Perfluorononanoic acid (PFNA)	83.6	4.00	"	80.0		105	50-150				
Perfluorodecanoic acid (PFDA)	90.1	4.00	"	80.0		113	50-150				
Perfluoroundecanoic acid (PFUnA)	90.6	4.00	"	80.0		113	50-150				
Perfluorododecanoic acid (PFDoA)	92.0	4.00	"	80.0		115	50-150				
Perfluorotridecanoic acid (PFTTrDA)	90.0	4.00	"	80.0		113	50-150				
Perfluorotetradecanoic acid (PFTA)	84.6	4.00	"	80.0		106	50-150				
N-MeFOSAA	89.4	4.00	"	80.0		112	50-150				
N-EtFOSAA	97.2	4.00	"	80.0		121	50-150				
Perfluoropentanoic acid (PFPeA)	179	8.00	"	160		112	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	94.7	4.00	"	80.0		118	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	90.1	3.82	"	76.4		118	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	90.5	3.86	"	77.2		117	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	323	15.2	"	304		106	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	341	15.4	"	307		111	50-150				
Perfluoro-n-butanoic acid (PFBA)	361	16.0	"	320		113	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	175	7.12	"	142		123	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	159	8.00	"	160		99.2	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	173	8.00	"	160		108	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	180	8.00	"	160		112	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	87.0	3.76	"	75.2		116	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	321	15.0	"	300		107	50-150				
HFPO-DA (Gen-X)	147	16.0	"	160		91.8	50-150				
11CL-PF3OUdS	131	15.1	"	151		86.7	50-150				
9CL-PF3ONS	164	15.0	"	150		110	50-150				
ADONA	147	15.1	"	151		97.3	50-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

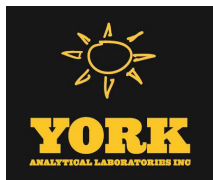
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40651 - EPA 1633 Prep

LCS (BB40651-BS1)

Prepared: 02/10/2024 Analyzed: 02/12/2024

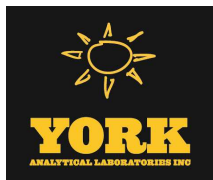
Perfluorododecanesulfonic acid (PFDoS)	51.3	3.88	ng/L	77.6		66.1	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	99.0	3.84	"	76.8		129	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	313	10.0	"	320		97.9	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1730	50.0	"	1600		108	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1780	50.0	"	1600		111	50-150				
N-MeFOSE	784	40.0	"	800		98.0	50-150				
N-MeFOSA	85.9	4.00	"	80.0		107	50-150				
N-EtFOSE	742	40.0	"	800		92.7	50-150				
N-EtFOSA	69.9	4.00	"	80.0		87.4	50-150				
Surrogate: M3PFBS	39.9		"	38.8		103	25-150				
Surrogate: M5PFHxA	47.6		"	41.7		114	25-150				
Surrogate: M4PFHpA	45.5		"	41.7		109	25-150				
Surrogate: M3PFHxS	40.9		"	39.5		104	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	42.1		"	41.7		101	25-150				
Surrogate: M6PFDA	20.9		"	20.8		101	25-150				
Surrogate: M7PFUdA	23.3		"	20.8		112	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	20.3		"	20.8		97.6	25-150				
Surrogate: M2PFTeDA	13.2		"	20.8		63.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	173		"	167		104	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	41.4		"	39.9		104	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	93.7		"	83.3		112	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	47.3		"	41.7		114	10-150				
Surrogate: d3-N-MeFOSAA	76.4		"	83.3		91.7	25-150				
Surrogate: d5-N-EtFOSAA	80.9		"	83.3		97.1	25-150				
Surrogate: M2-6:2 FTS	71.5		"	79.2		90.2	25-200				
Surrogate: M2-8:2 FTS	72.2		"	80.0		90.2	25-200				
Surrogate: M9PFNA	23.8		"	20.8		114	25-150				
Surrogate: M2-4:2 FTS	72.2		"	78.2		92.3	25-150				
Surrogate: d-N-MeFOSA	27.7		"	41.7		66.5	25-150				
Surrogate: d-N-EtFOSA	26.5		"	41.7		63.6	25-150				
Surrogate: M3HFPO-DA	212		"	167		127	25-150				
Surrogate: d9-N-EtFOSE	251		"	417		60.3	25-150				
Surrogate: d7-N-MeFOSE	300		"	417		71.9	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40651 - EPA 1633 Prep											
LCS (BB40651-BS2)						Prepared: 02/10/2024 Analyzed: 02/12/2024					
Perfluorobutanesulfonic acid (PFBS)	15.3	3.54	ng/L	14.2		108	50-150				
Perfluorohexanoic acid (PFHxA)	16.5	4.00	"	16.0		103	50-150				
Perfluoroheptanoic acid (PFHpA)	18.8	4.00	"	16.0		117	50-150				
Perfluorohexanesulfonic acid (PFHxS)	16.6	3.66	"	14.6		114	50-150				
Perfluorooctanoic acid (PFOA)	15.7	4.00	"	16.0		98.2	50-150				
Perfluorooctanesulfonic acid (PFOS)	15.0	3.72	"	14.9		101	50-150				
Perfluorononanoic acid (PFNA)	15.7	4.00	"	16.0		98.3	50-150				
Perfluorodecanoic acid (PFDA)	16.7	4.00	"	16.0		104	50-150				
Perfluoroundecanoic acid (PFUnA)	16.9	4.00	"	16.0		106	50-150				
Perfluorododecanoic acid (PFDoA)	20.7	4.00	"	16.0		129	50-150				
Perfluorotridecanoic acid (PFTriDA)	27.1	4.00	"	16.0		169	50-150	High Bias			
Perfluorotetradecanoic acid (PFTA)	31.6	4.00	"	16.0		198	50-150	High Bias			
N-MeFOSAA	17.9	4.00	"	16.0		112	50-150				
N-EtFOSAA	18.0	4.00	"	16.0		113	50-150				
Perfluoropentanoic acid (PFPeA)	34.0	8.00	"	32.0		106	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	19.5	4.00	"	16.0		122	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	17.3	3.82	"	15.3		113	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	19.9	3.86	"	15.4		129	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	65.2	15.2	"	60.8		107	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	77.1	15.4	"	61.4		126	50-150				
Perfluoro-n-butanoic acid (PFBA)	67.9	16.0	"	64.0		106	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	34.4	7.12	"	28.5		121	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	27.5	8.00	"	32.0		86.0	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	32.8	8.00	"	32.0		103	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	35.4	8.00	"	32.0		111	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	17.5	3.76	"	15.0		117	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	61.5	15.0	"	60.0		103	50-150				
HFPO-DA (Gen-X)	30.8	16.0	"	32.0		96.2	50-150				
11CL-PF3OUdS	30.4	15.1	"	30.2		100	50-150				
9CL-PF3ONS	29.7	15.0	"	29.9		99.3	50-150				
ADONA	28.9	15.1	"	30.2		95.5	50-150				
Perfluorododecanesulfonic acid (PFDoS)	18.3	3.88	"	15.5		118	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	18.9	3.84	"	15.4		123	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	59.7	10.0	"	64.0		93.3	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	330	50.0	"	320		103	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	288	50.0	"	320		90.2	50-150				
N-MeFOSE	285	40.0	"	160		178	50-150	High Bias			
N-MeFOSA	20.5	4.00	"	16.0		128	50-150				
N-EtFOSE	276	40.0	"	160		173	50-150	High Bias			
N-EtFOSA	29.7	4.00	"	16.0		186	50-150	High Bias			
Surrogate: M3PFBS	47.0		"	38.8		121	25-150				
Surrogate: M5PFHxA	55.1		"	41.7		132	25-150				
Surrogate: M4PFHpA	48.0		"	41.7		115	25-150				
Surrogate: M3PFHxS	49.6		"	39.5		126	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	51.3		"	41.7		123	25-150				
Surrogate: M6PFDA	25.2		"	20.8		121	25-150				
Surrogate: M7PFUdA	24.8		"	20.8		119	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	22.4		"	20.8		108	25-150				
Surrogate: M2PFTeDA	17.6		"	20.8		84.6	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

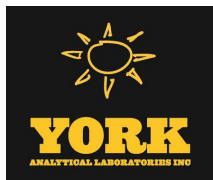
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40651 - EPA 1633 Prep

LCS (BB40651-BS2)

Prepared: 02/10/2024 Analyzed: 02/12/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	186		ng/L	167		112	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	50.4		"	39.9		126	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	110		"	83.3		132	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	55.3		"	41.7		133	10-150				
Surrogate: d3-N-MeFOSAA	92.5		"	83.3		111	25-150				
Surrogate: d5-N-EtFOSAA	106		"	83.3		127	25-150				
Surrogate: M2-6:2 FTS	87.4		"	79.2		110	25-200				
Surrogate: M2-8:2 FTS	77.5		"	80.0		96.9	25-200				
Surrogate: M9PFNA	26.9		"	20.8		129	25-150				
Surrogate: M2-4:2 FTS	92.3		"	78.2		118	25-150				
Surrogate: d-N-MeFOSA	33.2		"	41.7		79.6	25-150				
Surrogate: d-N-EtFOSA	25.3		"	41.7		60.8	25-150				
Surrogate: M3HFPO-DA	248		"	167		148	25-150				
Surrogate: d9-N-EtFOSE	341		"	417		81.8	25-150				
Surrogate: d7-N-MeFOSE	375		"	417		90.0	25-150				



Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41291 - EPA SW846-3510C Low Level

Blank (BA41291-BLK1)

Prepared: 01/19/2024 Analyzed: 01/20/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	0.150	mg/L								
Surrogate: 1-Chlorooctadecane	0.0959		"	0.100		95.9	30-140				

LCS (BA41291-BS1)

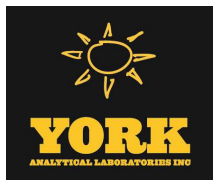
Prepared: 01/19/2024 Analyzed: 01/20/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.648	0.150	mg/L	0.750		86.5	60-120				
Surrogate: 1-Chlorooctadecane	0.0749		"	0.100		74.9	30-140				

LCS Dup (BA41291-BSD1)

Prepared: 01/19/2024 Analyzed: 01/20/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.560	0.150	mg/L	0.750		74.6	60-120		14.7	30	
Surrogate: 1-Chlorooctadecane	0.0617		"	0.100		61.7	30-140				



Metals by ICP/MS - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BA41508 - EPA 3015A

Blank (BA41508-BLK1)

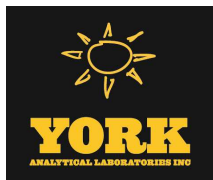
Prepared: 01/24/2024 Analyzed: 01/25/2024

Antimony	ND	0.00111	mg/L
Arsenic	ND	0.00111	"
Barium	ND	0.00111	"
Beryllium	ND	0.000333	"
Cadmium	ND	0.000556	"
Chromium	ND	0.00111	"
Copper	ND	0.00111	"
Lead	ND	0.00111	"
Nickel	ND	0.00111	"
Selenium	ND	0.00111	"
Silver	ND	0.00111	"
Thallium	ND	0.00111	"
Vanadium	ND	0.00111	"
Zinc	ND	0.00111	"

LCS (BA41508-BS1)

Prepared: 01/24/2024 Analyzed: 01/25/2024

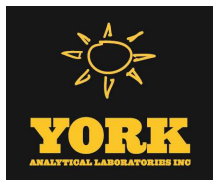
Antimony	0.051	ug/mL	0.0500	103	80-120
Arsenic	0.049	"	0.0500	98.7	80-120
Barium	0.049	"	0.0500	98.0	80-120
Beryllium	0.047	"	0.0500	94.9	80-120
Cadmium	0.049	"	0.0500	97.5	80-120
Chromium	0.054	"	0.0500	108	80-120
Copper	0.047	"	0.0500	93.8	80-120
Lead	0.048	"	0.0500	96.3	80-120
Nickel	0.047	"	0.0500	93.2	80-120
Selenium	0.051	"	0.0500	102	80-120
Silver	0.052	"	0.0500	105	80-120
Thallium	0.048	"	0.0500	95.3	80-120
Vanadium	0.046	"	0.0500	91.5	80-120
Zinc	0.052	"	0.0500	103	80-120



Mercury by EPA 7000/200 Series Methods - Quality Control Data

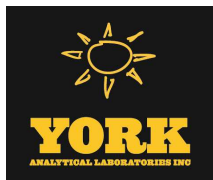
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag
Batch BA41272 - EPA SW846-7470A									
Blank (BA41272-BLK1)							Prepared & Analyzed: 01/19/2024		
Mercury	ND	0.0002	mg/L						
Blank (BA41272-BLK2)							Prepared & Analyzed: 01/19/2024		
Mercury	ND	0.0002	mg/L						
LCS (BA41272-BS1)							Prepared & Analyzed: 01/19/2024		
Mercury	0.0018864	0.0002	mg/L	0.00200		94.3	80-120		
LCS (BA41272-BS2)							Prepared & Analyzed: 01/19/2024		
Mercury	0.0021163	0.0002	mg/L	0.00200		106	80-120		



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
24A1057-01	MW-1R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24A1057-02	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24A1057-03	MW-6	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24A1057-04	DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24A1057-05	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

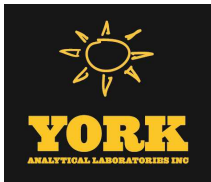


Sample and Data Qualifiers Relating to This Work Order

QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.



If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Corrective Action: 1,4-Dioxane was activated for samples -1 through -4 on 1/19/24. Additionally, PFAS was activated on -3.



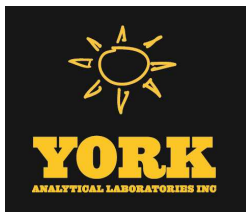
Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.

74A1057

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK		Page 1 of 1	
YOUR INFORMATION		Report To:	
Company: VHB	Company: " "	Invoice To:	
Address: 100 Grant Meadow Road Suite 200	Address: " "	Company: " "	
Phone: 860 807 4303	Phone: " "	Address: " "	
Contact: Pamela Lind	Contact: " "	Phone: " "	
E-mail: p.lind@vbb.com	E-mail: " "	Contact: " "	
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.		E-mail: " "	
Neal Holstein Neal Holstein		YOUR Project Number 43340	
Samples Collected by: (print AND sign your name)		YOUR Project Name Hempstead Park	
Sample Identification		YOUR PO#: " "	
MW-1R	Sample Matrix GLW	Report / EDD Type (circle selections)	
MW-3	GLW	Summary Report CT RCP EQUIS (Standard)	
MW-6	GLW	QA Report CT RCP DQA/DUE NYSDEC EQUIS	
DUP	GLW	CMDP NJDEP Reduced NJDKQP	
Tri Blank	-	Standard Excel EDD Deliverables NJDEP SRP HazSite	
Analyses Requested		NY ASP B Package Other:	
Date/Time Sampled		Other:	
1/17/24 14:00	VOCs, PAHs, ETPh, CT 15 metals, BPS, 1,4-dioxane	Container Type No.	
1/17/24 15:10	VOCs, PAHs, ETPh, CT 15 metals	11	
1/17/24 12:10	VOCs, PAHs, ETPh, CT 15 metals, PFAS, 1,4-dioxane	11	
1/17/24 11:00	VOCs, PAHs, ETPh, CT 15 metals, PFAS, 1,4-dioxane	11	
-	VOCs	3	
Preservation: (check all that apply)		Special Instruction	
HCl ☒ MeOH ☒ HNO3 ☒ H2SO4 ☒ NaOH ☒		Field Filtered	
ZnAc ☒ Ascorbic Acid ☒ Other: ☒		Lab to Filter	
Date/Time		Date/Time	
1/17/24 17:00	VHB Fridge	1/18/24 11:38	
Samples Relinquished by / Company		Date/Time	
1. Samples Relinquished by / Company		Date/Time	
2. Samples Relinquished by / Company		Date/Time	
3. Samples Relinquished by / Company		Date/Time	
4. Samples Relinquished by / Company		Date/Time	
Comments: Tax exempt - City of New London - PFAS by EPA method 1631		Temperature 3.9 Degrees C	



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 02/15/2024

Client Project ID: 43340 - Hempstead Park

York Project (SDG) No.: 24B0399



CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037

New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 02/15/2024
Client Project ID: 43340 - Hempstead Park
York Project (SDG) No.: 24B0399

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 07, 2024 and listed below. The project was identified as your project: **43340 - Hempstead Park**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24B0399-03	VHB-SB-06 (0.3-2.1)	Soil	02/06/2024	02/07/2024

General Notes for York Project (SDG) No.: 24B0399

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

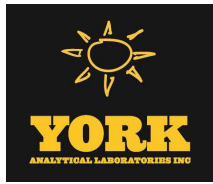
Approved By:



Cassie L. Mosher
Laboratory Manager

Date: 02/15/2024





Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0399-03

York Project (SDG) No.

24B0399

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:25 am

Date Received

02/07/2024

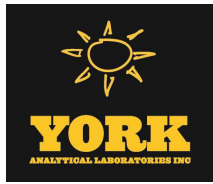
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.170	0.272	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	0.0933	J	ug/kg dry	0.0814	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.161	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.275	0.281	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.264	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.19		ug/kg dry	0.256	0.286	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.290	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.293	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.304	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.250	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.192	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.158	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.227	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.298	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.167	0.614	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.224	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.238	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.293	0.296	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.913	1.17	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	1.16	1.18	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.167	1.23	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NELAC-NY12058,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ



Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0399-03

York Project (SDG) No.

24B0399

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:25 am

Date Received

02/07/2024

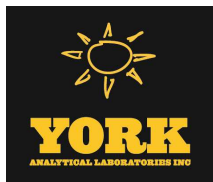
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ug/kg dry	0.213	0.546	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.296	0.614	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS -L	ug/kg dry	0.0952	0.614	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.147	0.614	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.241	0.289	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.913	1.15	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.933	1.23	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
763051-92-9	11CL-PF3OUdS	ND	PF-LCS -L	ug/kg dry	0.477	1.16	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.378	1.15	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
919005-14-4	ADONA	ND		ug/kg dry	0.267	1.16	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND	PF-LCS -L	ug/kg dry	0.259	0.298	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.190	0.295	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097 ,NJDEP-NY037	02/14/2024 12:54	02/15/2024 12:28	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	0.973	1.53	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	3.22	7.67	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	2.30	7.67	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
24448-09-7	N-MeFOSE	ND		ug/kg dry	0.938	3.07	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.276	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
1691-99-2	N-EtFOSE	ND		ug/kg dry	1.07	3.07	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.304	0.307	1	EPA 1633 Draft 3 Certifications: NELAC-NH2097	02/14/2024 12:54	02/15/2024 12:28	ESJ
Surrogate Recoveries		Result	Acceptance Range								
Surrogate: M3PFBS		97.5 %	25-150								
Surrogate: M5PFHxA		96.6 %	25-150								
Surrogate: M4PFHpA		85.8 %	25-150								
Surrogate: M3PFHxS		100 %	25-150								



Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0399-03

York Project (SDG) No.

24B0399

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:25 am

Date Received

02/07/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C8]octanoic aci	96.7 %			25-150						
	Surrogate: M6PFDA	95.9 %			25-150						
	Surrogate: M7PFUdA	94.9 %			25-150						
	Surrogate: Perfluoro-n-[1,2-13C2]dodecan	96.5 %			25-150						
	Surrogate: M2PFTeDA	78.6 %			10-150						
	Surrogate: Perfluoro-n-[13C4]butanoic aci	96.1 %			25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfo	108 %			25-150						
	Surrogate: Perfluoro-n-[13C5]pentanoic ac	93.6 %			25-150						
	Surrogate: Perfluoro-1-[13C8]octanesulfo	69.5 %			10-150						
	Surrogate: d3-N-MeFOSAA	73.9 %			25-150						
	Surrogate: d5-N-EtFOSAA	85.9 %			25-150						
	Surrogate: M2-6:2 FTS	87.9 %			25-200						
	Surrogate: M2-8:2 FTS	78.0 %			25-200						
	Surrogate: M9PFNA	105 %			25-150						
	Surrogate: M2-4:2 FTS	89.6 %			25-150						
	Surrogate: d-N-MeFOSA	49.9 %			25-150						
	Surrogate: d-N-EtFOSA	49.3 %			25-150						
	Surrogate: M3HFPO-DA	107 %			25-150						
	Surrogate: d9-N-EtFOSE	48.4 %			25-150						
	Surrogate: d7-N-MeFOSE	46.8 %			25-150						

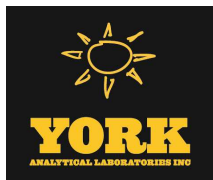
Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.0		%	0.100	1	SM 2540G	02/14/2024 17:07	02/14/2024 17:14	YR
							Certifications:	CTDOH-PH-0723		



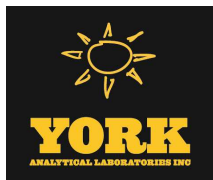
Analytical Batch Summary

Batch ID: BB40423 **Preparation Method:** % Solids Prep **Prepared By:** AC

YORK Sample ID	Client Sample ID	Preparation Date
24B0399-03	VHB-SB-06 (0.3-2.1)	02/14/24
BB40423-DUP1	Duplicate	02/14/24

Batch ID: BB40847 **Preparation Method:** EPA 1633 Prep **Prepared By:** KFH

YORK Sample ID	Client Sample ID	Preparation Date
24B0399-03	VHB-SB-06 (0.3-2.1)	02/14/24
BB40847-BLK1	Blank	02/14/24
BB40847-BS1	LCS	02/14/24
BB40847-BS2	LCS	02/14/24



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

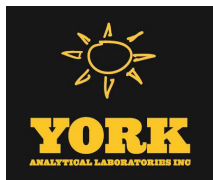
Batch BB40847 - EPA 1633 Prep

Blank (BB40847-BLK1)

Prepared: 02/14/2024 Analyzed: 02/15/2024

Perfluorobutanesulfonic acid (PFBS)	ND	0.175	ug/kg wet								
Perfluorohexanoic acid (PFHxA)	ND	0.198	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.198	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.181	"								
Perfluorooctanoic acid (PFOA)	ND	0.198	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.184	"								
Perfluorononanoic acid (PFNA)	ND	0.198	"								
Perfluorodecanoic acid (PFDA)	ND	0.198	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.198	"								
Perfluorododecanoic acid (PFDoA)	ND	0.198	"								
Perfluorotridecanoic acid (PFTrDA)	ND	0.198	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.198	"								
N-MeFOSAA	ND	0.198	"								
N-EtFOSAA	ND	0.198	"								
Perfluoropentanoic acid (PFPeA)	ND	0.396	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.198	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.198	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.191	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	0.752	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	0.760	"								
Perfluoro-n-butanoic acid (PFBA)	ND	0.792	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND	0.352	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	0.396	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.396	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.396	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.186	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	0.743	"								
HFPO-DA (Gen-X)	ND	0.792	"								
11CL-PF3OUdS	ND	0.749	"								
9CL-PF3ONS	ND	0.741	"								
ADONA	ND	0.749	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	0.192	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	0.190	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	0.990	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	4.95	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	4.95	"								
N-MeFOSE	ND	1.98	"								
N-MeFOSA	ND	0.198	"								
N-EtFOSE	ND	1.98	"								
N-EtFOSA	ND	0.198	"								
Surrogate: M3PFBS	2.15		"	1.92		112	25-150				
Surrogate: M5PFHxA	2.26		"	2.06		110	25-150				
Surrogate: M4PFHpA	2.13		"	2.06		103	25-150				
Surrogate: M3PFHxS	2.08		"	1.96		106	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	1.95		"	2.06		94.5	25-150				
Surrogate: M6PFDA	0.933		"	1.03		90.6	25-150				
Surrogate: M7PFUdA	0.848		"	1.03		82.4	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.810		"	1.03		78.7	25-150				





PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40847 - EPA 1633 Prep

Blank (BB40847-BLK1)

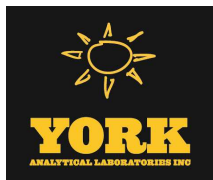
Prepared: 02/14/2024 Analyzed: 02/15/2024

Surrogate: M2PFTeDA	0.597		ug/kg wet	1.03		57.9	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.550		"	8.27		6.66	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.63		"	1.98		82.7	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.34		"	4.12		105	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOA)	1.73		"	2.06		83.8	10-150				
Surrogate: d3-N-MeFOSAA	2.71		"	4.12		65.8	25-150				
Surrogate: d5-N-EtFOSAA	2.71		"	4.12		65.6	25-150				
Surrogate: M2-6:2 FTS	3.65		"	3.92		93.2	25-200				
Surrogate: M2-8:2 FTS	2.78		"	3.96		70.3	25-200				
Surrogate: M9PFNA	0.939		"	1.03		91.2	25-150				
Surrogate: M2-4:2 FTS	3.94		"	3.87		102	25-150				
Surrogate: d-N-MeFOA	1.50		"	2.06		72.5	25-150				
Surrogate: d-N-EtFOA	1.18		"	2.06		57.2	25-150				
Surrogate: M3HFPO-DA	9.27		"	8.27		112	25-150				
Surrogate: d9-N-EtFOSE	8.84		"	20.6		42.8	25-150				
Surrogate: d7-N-MeFOSE	9.57		"	20.6		46.3	25-150				

LCS (BB40847-BS1)

Prepared: 02/14/2024 Analyzed: 02/15/2024

Perfluorobutanesulfonic acid (PFBS)	3.46	0.175	ug/kg wet	3.50		98.8	50-150				
Perfluorohexanoic acid (PFHxA)	3.81	0.198	"	3.95		96.4	50-150				
Perfluoroheptanoic acid (PFHpA)	4.09	0.198	"	3.95		103	50-150				
Perfluorohexanesulfonic acid (PFHxS)	3.70	0.181	"	3.62		102	50-150				
Perfluorooctanoic acid (PFOA)	3.55	0.198	"	3.95		89.8	50-150				
Perfluorooctanesulfonic acid (PFOS)	3.28	0.184	"	3.68		89.3	50-150				
Perfluorononanoic acid (PFNA)	3.47	0.198	"	3.95		87.9	50-150				
Perfluorodecanoic acid (PFDA)	3.73	0.198	"	3.95		94.3	50-150				
Perfluoroundecanoic acid (PFUnA)	4.19	0.198	"	3.95		106	50-150				
Perfluorododecanoic acid (PFDoA)	3.64	0.198	"	3.95		92.2	50-150				
Perfluorotridecanoic acid (PFTrDA)	5.19	0.198	"	3.95		131	50-150				
Perfluorotetradecanoic acid (PFTA)	3.99	0.198	"	3.95		101	50-150				
N-MeFOSAA	3.91	0.198	"	3.95		98.9	50-150				
N-EtFOSAA	4.10	0.198	"	3.95		104	50-150				
Perfluoropentanoic acid (PFPeA)	7.52	0.395	"	7.91		95.1	50-150				
Perfluoro-1-octanesulfonamide (FOA)	4.58	0.198	"	3.95		116	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	4.54	0.198	"	3.77		120	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	2.49	0.191	"	3.81		65.4	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	13.7	0.751	"	15.0		91.5	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	13.9	0.759	"	15.2		91.3	50-150				
Perfluoro-n-butanoic acid (PFBA)	14.4	0.791	"	15.8		91.3	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	7.63	0.352	"	7.04		108	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	6.88	0.395	"	7.91		87.1	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	2.17	0.395	"	7.91		27.4	50-150			Low Bias	
Perfluoro-5-oxahexanoic acid (PFMBA)	8.17	0.395	"	7.91		103	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	3.86	0.186	"	3.72		104	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	13.9	0.741	"	14.8		94.0	50-150				
HFPO-DA (Gen-X)	6.17	0.791	"	7.91		78.0	50-150				
11CL-PF3OUdS	3.20	0.747	"	7.47		42.9	50-150			Low Bias	
9CL-PF3ONS	4.79	0.739	"	7.39		64.8	50-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

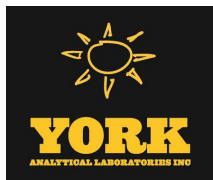
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40847 - EPA 1633 Prep

LCS (BB40847-BS1)

Prepared: 02/14/2024 Analyzed: 02/15/2024

ADONA	6.89	0.747	ug/kg wet	7.47		92.3	50-150				
Perfluorododecanesulfonic acid (PFDoS)	1.69	0.192	"	3.83		44.2	50-150	Low Bias			
Perfluoro-1-nonanesulfonic acid (PFNS)	3.18	0.190	"	3.79		83.8	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	11.2	0.988	"	15.8		70.7	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	68.0	4.94	"	79.1		86.1	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	52.3	4.94	"	79.1		66.1	50-150				
N-MeFOSE	34.8	1.98	"	39.5		88.1	50-150				
N-MeFOSA	3.85	0.198	"	3.95		97.4	50-150				
N-EtFOSE	34.8	1.98	"	39.5		88.1	50-150				
N-EtFOSA	4.72	0.198	"	3.95		119	50-150				
Surrogate: M3PFBS	2.21		"	1.92		115	25-150				
Surrogate: M5PFHxA	2.34		"	2.06		113	25-150				
Surrogate: M4PFHpA	2.21		"	2.06		107	25-150				
Surrogate: M3PFHxS	2.16		"	1.95		111	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	2.25		"	2.06		109	25-150				
Surrogate: M6PFDA	0.829		"	1.03		80.7	25-150				
Surrogate: M7PFUDA	0.639		"	1.03		62.2	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.583		"	1.03		56.8	25-150				
Surrogate: M2PFTeDA	0.337		"	1.03		32.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.626		"	8.25		7.59	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.62		"	1.97		82.4	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.47		"	4.12		109	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.68		"	2.06		81.5	10-150				
Surrogate: d3-N-MeFOSAA	2.16		"	4.12		52.5	25-150				
Surrogate: d5-N-EtFOSAA	1.92		"	4.12		46.6	25-150				
Surrogate: M2-6:2 FTS	3.61		"	3.91		92.2	25-200				
Surrogate: M2-8:2 FTS	2.76		"	3.95		69.7	25-200				
Surrogate: M9PFNA	1.12		"	1.03		109	25-150				
Surrogate: M2-4:2 FTS	3.77		"	3.86		97.5	25-150				
Surrogate: d-N-MeFOSA	1.33		"	2.06		64.5	25-150				
Surrogate: d-N-EtFOSA	0.844		"	2.06		41.0	25-150				
Surrogate: M3HFPO-DA	9.94		"	8.25		120	25-150				
Surrogate: d9-N-EtFOSE	5.18		"	20.6		25.1	25-150				
Surrogate: d7-N-MeFOSE	7.21		"	20.6		35.0	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

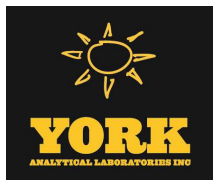
Batch BB40847 - EPA 1633 Prep

LCS (BB40847-BS2)

Prepared: 02/14/2024 Analyzed: 02/15/2024

Perfluorobutanesulfonic acid (PFBS)	0.745	0.176	ug/kg wet	0.704		106	50-150				
Perfluorohexanoic acid (PFHxA)	0.856	0.199	"	0.795		108	50-150				
Perfluoroheptanoic acid (PFHpA)	0.751	0.199	"	0.795		94.5	50-150				
Perfluorohexanesulfonic acid (PFHxS)	0.852	0.182	"	0.728		117	50-150				
Perfluorooctanoic acid (PFOA)	0.849	0.199	"	0.795		107	50-150				
Perfluorooctanesulfonic acid (PFOS)	0.735	0.185	"	0.740		99.4	50-150				
Perfluorononanoic acid (PFNA)	0.898	0.199	"	0.795		113	50-150				
Perfluorodecanoic acid (PFDA)	0.806	0.199	"	0.795		101	50-150				
Perfluoroundecanoic acid (PFUnA)	0.831	0.199	"	0.795		104	50-150				
Perfluorododecanoic acid (PFDoA)	0.850	0.199	"	0.795		107	50-150				
Perfluorotridecanoic acid (PFTriDA)	1.27	0.199	"	0.795		159	50-150	High Bias			
Perfluorotetradecanoic acid (PFTA)	0.998	0.199	"	0.795		125	50-150				
N-MeFOSAA	0.785	0.199	"	0.795		98.7	50-150				
N-EtFOSAA	0.886	0.199	"	0.795		111	50-150				
Perfluoropentanoic acid (PFPeA)	1.75	0.398	"	1.59		110	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	0.850	0.199	"	0.795		107	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	1.20	0.199	"	0.759		158	50-150	High Bias			
Perfluoro-1-decanesulfonic acid (PFDS)	0.741	0.192	"	0.767		96.6	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	3.27	0.755	"	3.02		108	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	3.52	0.763	"	3.05		115	50-150				
Perfluoro-n-butanoic acid (PFBA)	3.28	0.795	"	3.18		103	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	1.76	0.354	"	1.42		124	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	1.36	0.398	"	1.59		85.5	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	0.419	0.398	"	1.59		26.4	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	1.83	0.398	"	1.59		115	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	1.06	0.187	"	0.748		142	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	3.12	0.746	"	2.98		105	50-150				
HFPO-DA (Gen-X)	1.59	0.795	"	1.59		100	50-150				
11CL-PF3OUdS	0.482	0.751	"	1.50		32.1	50-150	Low Bias			
9CL-PF3ONS	0.842	0.744	"	1.49		56.6	50-150				
ADONA	1.49	0.751	"	1.50		99.2	50-150				
Perfluorododecanesulfonic acid (PFDoS)	0.254	0.193	"	0.771		33.0	50-150	Low Bias			
Perfluoro-1-nonanesulfonic acid (PFNS)	0.973	0.191	"	0.763		127	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	2.33	0.994	"	3.18		73.3	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	15.0	4.97	"	15.9		94.3	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	9.66	4.97	"	15.9		60.7	50-150				
N-MeFOSE	6.48	1.99	"	7.95		81.5	50-150				
N-MeFOSA	1.22	0.199	"	0.795		154	50-150	High Bias			
N-EtFOSE	8.19	1.99	"	7.95		103	50-150				
N-EtFOSA	1.24	0.199	"	0.795		156	50-150	High Bias			
Surrogate: M3PFBS	2.11		"	1.93		110	25-150				
Surrogate: M5PFHxA	2.29		"	2.07		111	25-150				
Surrogate: M4PFHpA	2.34		"	2.07		113	25-150				
Surrogate: M3PFHxS	1.81		"	1.96		91.9	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	2.13		"	2.07		103	25-150				
Surrogate: M6PFDA	0.666		"	1.03		64.4	25-150				
Surrogate: M7PFUdA	0.646		"	1.03		62.5	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.512		"	1.03		49.5	25-150				
Surrogate: M2PFTeDA	0.220		"	1.03		21.3	10-150				





PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

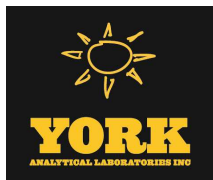
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40847 - EPA 1633 Prep

LCS (BB40847-BS2)

Prepared: 02/14/2024 Analyzed: 02/15/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.467		ug/kg wet	8.30		5.63	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.09		"	1.98		55.0	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	4.32		"	4.14		104	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.44		"	2.07		69.3	10-150				
Surrogate: d3-N-MeFOSAA	1.59		"	4.14		38.5	25-150				
Surrogate: d5-N-EtFOSAA	1.55		"	4.14		37.3	25-150				
Surrogate: M2-6:2 FTS	2.77		"	3.94		70.5	25-200				
Surrogate: M2-8:2 FTS	1.86		"	3.98		46.8	25-200				
Surrogate: M9PFNA	0.821		"	1.03		79.4	25-150				
Surrogate: M2-4:2 FTS	3.60		"	3.89		92.7	25-150				
Surrogate: d-N-MeFOSA	0.746		"	2.07		36.0	25-150				
Surrogate: d-N-EtFOSA	0.668		"	2.07		32.2	25-150				
Surrogate: M3HFPO-DA	9.87		"	8.30		119	25-150				
Surrogate: d9-N-EtFOSE	3.07		"	20.7		14.8	25-150				
Surrogate: d7-N-MeFOSE	5.03		"	20.7		24.3	25-150				



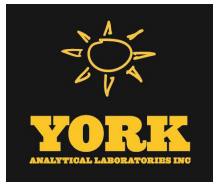
Miscellaneous Physical Parameters - Quality Control Data

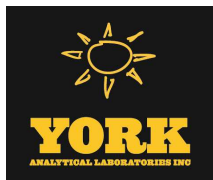
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag

Batch BB40423 - % Solids Prep

Duplicate (BB40423-DUP1)	*Source sample: 24B0604-01 (Duplicate)						Prepared & Analyzed: 02/14/2024				
% Solids	97.7	0.100	%		98.0			0.359	20		





Sample and Data Qualifiers Relating to This Work Order

PF-LCS-L	The LCS recovery was slightly below acceptable limits for the qualified compound. However, sample results are not biased low because results are corrected for isotope recovery.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

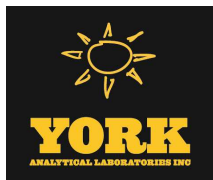
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



YORK Project No.

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below.

Your signature binds you to YORK's Standard Terms & Conditions.

20 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK

YOUR INFORMATION		REPORT TO:		INVOICE TO:		YOUR PROJECT NUMBER		TURN-AROUND TIME	
Company:	VHB	Company:	VHB	Company:	VHB	43340		RUSH - Next Day	
Address:	100 Great Meadow Road, Suite 200	Address:	100 Great Meadow Road, Suite 200	Address:	100 Great Meadow Road, Suite 200			RUSH - Two Day	
Phone:	860-895-7458	Phone:	860-807-4303	Phone:				RUSH - Three Day	
Contact:	Neal Hultstein	Contact:	Ramona Lind	Contact:		Hempstead Park		RUSH - Four Day	
E-mail:	Hultstein@vhb.com	E-mail:	plind@vhb.com	E-mail:				RUSH - Five Day	
				Vhb - ap-ct@vhb.com				Standard (6-9 Day)	
PFAS Standard is 7-10 Days									

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

Neal Hulstain

Samples Collected by: (print AND sign your name)	O - Oil	Other	Date/Time Sampled	Analyses Requested	Container Type	No.
VHB-SB-02 (2.9-3.9)	S		2/6/24 / 9:35	Hold	PL	1
VHB-SB-03 (5.5-6)	S		2/6/24 / 9:55	Hold	PL	1
VHB-SB-06 (0.3-2.1)	S		2/6/24 / 11:25	Hold	PL	1
VHB-SB-08 (1-1.8)	S		2/6/24 / 14:00	Hold	PL	1
DUP	S		2/6/24 / -	Hold	PL	1
Field Blank	S		2/6/24 / 15:00	Hold	PL	2

Comments:

Comments:		Preservation: (check all that apply)		Special Instruction			
		HCl	MeOH	HNO3	H2SO4	NaOH	Field Filtered
		ZnAc	Ascorbic Acid	Other:			Lab to Filter
Samples iced/chilled at time of lab pickup? circle Yes or No		Date/Time		Date/Time			
1. Samples Received by / Company		Date/Time		Date/Time			
VHB Fr. J. G. / VHB		2/6/24/17:00		VHB Fr. J. G. / VHB		2/7/24/12:05	
3. Samples Relinquished by / Company		Date/Time		Date/Time			
2/7/24 12:05		2/7/24 15:40					
4. Samples Received by / Company		Date/Time		Date/Time			
2/7/24 15:40				Samples Received in LAB by		Temperature	
				2/7/24 15:40		2-2	



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 03/08/2024

Client Project ID: 43340 - Hempstead Park

York Project (SDG) No.: 24B0405

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
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STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 03/08/2024
Client Project ID: 43340 - Hempstead Park
York Project (SDG) No.: 24B0405

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 07, 2024 and listed below. The project was identified as your project: **43340 - Hempstead Park**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24B0405-01	VHB-SB-01 (1.2-1.6)	Soil	02/06/2024	02/07/2024
24B0405-02	VHB-SB-01 (2.7-3.6)	Soil	02/06/2024	02/07/2024
24B0405-04	VHB-SB-02 (5-7)	Soil	02/06/2024	02/07/2024
24B0405-07	VHB-SB-03 (5.5-6.7)	Soil	02/06/2024	02/07/2024
24B0405-09	VHB-SB-04 (3-3.5)	Soil	02/06/2024	02/07/2024
24B0405-11	VHB-SB-05 (1-2)	Soil	02/06/2024	02/07/2024
24B0405-12	VHB-SB-05 (5-6.4)	Soil	02/06/2024	02/07/2024
24B0405-14	VHB-SB-06 (0.3-2.1)	Soil	02/06/2024	02/07/2024
24B0405-15	VHB-SB-06 (5-7)	Soil	02/06/2024	02/07/2024
24B0405-18	VHB-SB-07 (5-6)	Soil	02/06/2024	02/07/2024
24B0405-21	VHB-SB-08 (7-8)	Soil	02/06/2024	02/07/2024
24B0405-23	VHB-SB-09 (5-7)	Soil	02/06/2024	02/07/2024
24B0405-26	DUP	Soil	02/06/2024	02/07/2024
24B0405-27	Trip Blank	Water	02/06/2024	02/07/2024

General Notes for York Project (SDG) No.: 24B0405

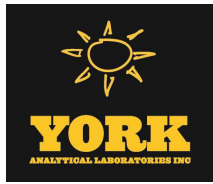
1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By: 

Date: 03/08/2024

Cassie L Mosher
Laboratory Manager





Sample Information

Client Sample ID: VHB-SB-01 (1.2-1.6)

York Sample ID: 24B0405-01

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:10 am

Date Received

02/07/2024

Analyzed by: Phoenix Environmental Labs, Inc.

Polychlorinated Biphenyls- Soxhlet Extraction

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SW3540C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	PCB-1016	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
11104-28-2	PCB-1221	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
11141-16-5	PCB-1232	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
53469-21-9	PCB-1242	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
12672-29-6	PCB-1248	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
11097-69-1	PCB-1254	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
11096-82-5	PCB-1260	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
37324-23-5	PCB-1262	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007
11100-14-4	PCB-1268	ND		mg/Kg	0.4	10	SW8082A	02/08/2024 00:00	02/09/2024 22:15	CT007

Total Solid

Log-in Notes:

Sample Notes:

Sample Prepared by Method: SW846-%Solid

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Percent Solid	81		%		1	SW846-%Solid	02/06/2024 09:10	02/08/2024 23:14	CT007

Sample Information

Client Sample ID: VHB-SB-01 (2.7-3.6)

York Sample ID: 24B0405-02

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:15 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
120-12-7	Anthracene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH

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STRATFORD, CT 06615

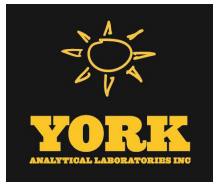
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-01 (2.7-3.6)

York Sample ID: 24B0405-02

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:15 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
218-01-9	Chrysene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
86-73-7	Fluorene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
129-00-0	Pyrene	ND		mg/kg dry	0.517	2	EPA 8270D	02/09/2024 08:41	02/12/2024 17:49	KH
Surrogate Recoveries		Result		Acceptance Range						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	78.2 %		30-130						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	78.9 %		30-130						
1718-51-0	Surrogate: SURR: Terphenyl-d14	80.8 %		30-130						

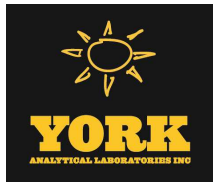
Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-38-2	Arsenic	3.11		mg/kg dry	1.09	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-39-3	Barium	14.7		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.037	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.219	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-47-3	Chromium	1.48		mg/kg dry	0.365	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-50-8	Copper	ND		mg/kg dry	1.46	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7439-92-1	Lead	3.55		mg/kg dry	0.365	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-02-0	Nickel	ND		mg/kg dry	0.727	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7782-49-2	Selenium	ND		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-22-4	Silver	ND		mg/kg dry	0.368	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-28-0	Thallium	ND		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-62-2	Vanadium	6.24		mg/kg dry	0.727	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG
7440-66-6	Zinc	7.39		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:57	02/14/2024 17:49	CEG



Sample Information

Client Sample ID: VHB-SB-01 (2.7-3.6)

York Sample ID: 24B0405-02

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:15 am

Date Received

02/07/2024

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0315	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	95.2		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-02 (5-7)

York Sample ID: 24B0405-04

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:25 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

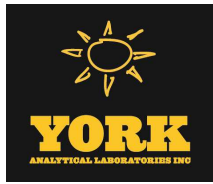
Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
120-12-7	Anthracene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
218-01-9	Chrysene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
86-73-7	Fluorene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH
129-00-0	Pyrene	ND		mg/kg dry	0.689	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:18	KH

Surrogate Recoveries

Result

Acceptance Range



Sample Information

Client Sample ID: VHB-SB-02 (5-7)

York Sample ID: 24B0405-04

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 9:25 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	67.0 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	69.6 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	70.1 %			30-130					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 ETPH

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/kg dry	54.3	1	CT DEP ETPH	02/15/2024 08:38	02/15/2024 13:39	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	82.9 %			50-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	72.2		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-03 (5.5-6.7)

York Sample ID: 24B0405-07

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:00 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
120-12-7	Anthracene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH

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STRATFORD, CT 06615

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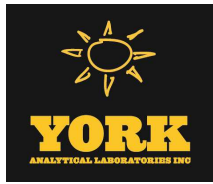
(203) 325-1371

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RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-03 (5.5-6.7)

York Sample ID: 24B0405-07

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:00 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
218-01-9	Chrysene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
86-73-7	Fluorene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
129-00-0	Pyrene	ND		mg/kg dry	0.623	2	EPA 8270D	02/09/2024 08:41	02/12/2024 18:47	KH
Surrogate Recoveries		Result		Acceptance Range						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	59.2 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	56.6 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	53.5 %			30-130					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 ETPH

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/kg dry	48.5	1	CT DEP ETPH	02/14/2024 09:03	02/14/2024 18:24	GXB
Surrogate Recoveries		Result		Acceptance Range						
3386-33-2	Surrogate: 1-Chlorooctadecane	50.7 %			50-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	77.9		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-04 (3-3.5)

York Sample ID: 24B0405-09

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:30 am

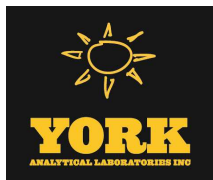
Date Received

02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: VHB-SB-04 (3-3.5)

York Sample ID: 24B0405-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 10:30 am

02/07/2024

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
78-93-3	2-Butanone	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
591-78-6	2-Hexanone	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
67-64-1	Acetone	ND	ICVE	mg/kg dry	0.010	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
71-43-2	Benzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
108-86-1	Bromobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-25-2	Bromoform	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
74-83-9	Bromomethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-00-3	Chloroethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
67-66-3	Chloroform	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA

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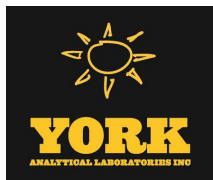
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-04 (3-3.5)

York Sample ID: 24B0405-09

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

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Collection Date/Time
February 6, 2024 10:30 am

Date Received
02/07/2024

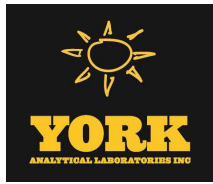
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
74-95-3	Dibromomethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-71-8	Dichlorodifluoromethane	ND	ICVE	mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-09-2	Methylene chloride	ND		mg/kg dry	0.010	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
91-20-3	Naphthalene	ND		mg/kg dry	0.010	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
95-47-6	o-Xylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.010	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
100-42-5	Styrene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
109-99-9	Tetrahydrofuran	ND		mg/kg dry	0.010	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
108-88-3	Toluene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0052	1	EPA 8260C	02/15/2024 09:00	02/15/2024 12:30	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	102 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	127 %	70-130							



Sample Information

Client Sample ID: VHB-SB-04 (3-3.5)

York Sample ID: 24B0405-09

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

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Collection Date/Time

February 6, 2024 10:30 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
120-12-7	Anthracene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
218-01-9	Chrysene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
86-73-7	Fluorene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
129-00-0	Pyrene	ND		mg/kg dry	0.610	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:17	KH
Surrogate Recoveries		Result		Acceptance Range						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	67.8 %		30-130						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	70.5 %		30-130						
1718-51-0	Surrogate: SURR: Terphenyl-d14	73.9 %		30-130						

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	81.2		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-05 (1-2)

York Sample ID: 24B0405-11

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

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Collection Date/Time

February 6, 2024 10:55 am

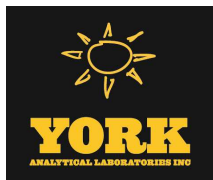
Date Received

02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: VHB-SB-05 (1-2)

York Sample ID: 24B0405-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 10:55 am

02/07/2024

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND	CCVE	mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
78-93-3	2-Butanone	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
591-78-6	2-Hexanone	ND	CCVE	mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
67-64-1	Acetone	ND	ICVE	mg/kg dry	0.0095	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
71-43-2	Benzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
108-86-1	Bromobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-25-2	Bromoform	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
74-83-9	Bromomethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-00-3	Chloroethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
67-66-3	Chloroform	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

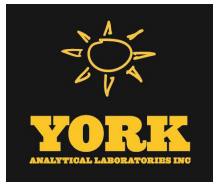
RICHMOND HILL, NY 11418

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(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-05 (1-2)

York Sample ID: 24B0405-11

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:55 am

Date Received

02/07/2024

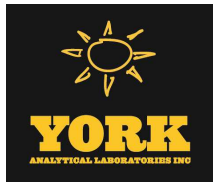
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
74-95-3	Dibromomethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-71-8	Dichlorodifluoromethane	ND	CCVE, ICVE	mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-09-2	Methylene chloride	ND		mg/kg dry	0.0095	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
91-20-3	Naphthalene	ND	CCVE	mg/kg dry	0.0095	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
95-47-6	o-Xylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0095	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
100-42-5	Styrene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
109-99-9	Tetrahydrofuran	ND		mg/kg dry	0.0095	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
108-88-3	Toluene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0047	1	EPA 8260C	02/14/2024 09:00	02/14/2024 20:03	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	101 %	70-130							
2037-26-5	Surrogate: SURRE: Toluene-d8	97.6 %	70-130							
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	97.6 %	70-130							



Sample Information

Client Sample ID: VHB-SB-05 (1-2)

York Sample ID: 24B0405-11

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:55 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
120-12-7	Anthracene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
218-01-9	Chrysene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
86-73-7	Fluorene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
129-00-0	Pyrene	ND		mg/kg dry	0.552	2	EPA 8270D	02/09/2024 08:41	02/12/2024 19:46	KH
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	68.8 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	74.1 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	78.2 %	30-130							

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	1.94	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-38-2	Arsenic	ND		mg/kg dry	1.16	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-39-3	Barium	34.4		mg/kg dry	1.93	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.039	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.232	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-47-3	Chromium	8.14		mg/kg dry	0.387	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-50-8	Copper	132		mg/kg dry	1.55	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7439-92-1	Lead	795		mg/kg dry	0.387	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-02-0	Nickel	10.7		mg/kg dry	0.771	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7782-49-2	Selenium	ND		mg/kg dry	1.94	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-22-4	Silver	ND		mg/kg dry	0.390	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-28-0	Thallium	ND		mg/kg dry	1.94	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG
7440-62-2	Vanadium	17.2		mg/kg dry	0.771	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG

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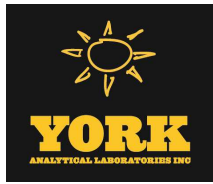
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-05 (1-2)

York Sample ID: 24B0405-11

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 10:55 am

Date Received

02/07/2024

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	479		mg/kg dry	1.93	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:11	CEG

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0447		mg/kg dry	0.0334	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.7		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-05 (5-6.4)

York Sample ID: 24B0405-12

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:00 am

Date Received

02/07/2024

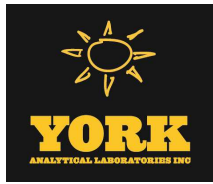
Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	2.46	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-38-2	Arsenic	2.09		mg/kg dry	1.47	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-39-3	Barium	148		mg/kg dry	2.45	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.050	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.295	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-47-3	Chromium	20.4		mg/kg dry	0.492	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-50-8	Copper	9.94		mg/kg dry	1.97	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7439-92-1	Lead	28.3		mg/kg dry	0.492	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-02-0	Nickel	17.2		mg/kg dry	0.979	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7782-49-2	Selenium	ND		mg/kg dry	2.46	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-22-4	Silver	ND		mg/kg dry	0.495	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-28-0	Thallium	ND		mg/kg dry	2.46	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-62-2	Vanadium	34.8		mg/kg dry	0.979	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG
7440-66-6	Zinc	38.8		mg/kg dry	2.45	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:13	CEG



Sample Information

Client Sample ID: VHB-SB-05 (5-6.4)

York Sample ID: 24B0405-12

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:00 am

Date Received

02/07/2024

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.0566		mg/kg dry	0.0425	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	70.7		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0405-14

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:30 am

Date Received

02/07/2024

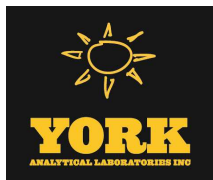
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT



Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0405-14

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 11:30 am

Date Received
02/07/2024

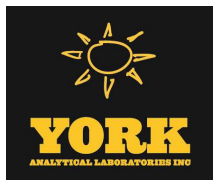
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
78-93-3	2-Butanone	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
591-78-6	2-Hexanone	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
67-64-1	Acetone	ND	ICVE, QL-02	mg/kg dry	0.014	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
71-43-2	Benzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
108-86-1	Bromobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-25-2	Bromoform	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
74-83-9	Bromomethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-00-3	Chloroethane	ND	CCVE, QL-02	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
67-66-3	Chloroform	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
74-87-3	Chloromethane	ND	CCVE	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
74-95-3	Dibromomethane	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-71-8	Dichlorodifluoromethane	ND	CCVE	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-09-2	Methylene chloride	ND		mg/kg dry	0.014	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
91-20-3	Naphthalene	ND		mg/kg dry	0.014	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
95-47-6	o-Xylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT



Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0405-14

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 11:30 am

Date Received
02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.014	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
100-42-5	Styrene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
127-18-4	Tetrachloroethylene	ND	ICVE	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
109-99-9	Tetrahydrofuran	ND		mg/kg dry	0.014	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
108-88-3	Toluene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-69-4	Trichlorofluoromethane	ND	CCVE	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
75-01-4	Vinyl Chloride	ND	CCVE	mg/kg dry	0.0070	1	EPA 8260C	02/14/2024 09:00	02/14/2024 13:46	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	99.2 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	96.6 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	113 %	70-130							

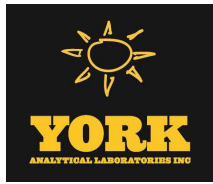
SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
120-12-7	Anthracene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
218-01-9	Chrysene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
86-73-7	Fluorene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH



Sample Information

Client Sample ID: VHB-SB-06 (0.3-2.1)

York Sample ID: 24B0405-14

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 11:30 am

Date Received

02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
129-00-0	Pyrene	ND		mg/kg dry	0.527	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:16	KH
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	65.8 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	73.0 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	75.0 %			30-130					

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-38-2	Arsenic	ND		mg/kg dry	1.14	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-39-3	Barium	22.6		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.038	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.229	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-47-3	Chromium	9.21		mg/kg dry	0.381	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-50-8	Copper	7.65		mg/kg dry	1.52	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7439-92-1	Lead	11.9		mg/kg dry	0.381	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-02-0	Nickel	9.99		mg/kg dry	0.759	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7782-49-2	Selenium	ND		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-22-4	Silver	ND		mg/kg dry	0.384	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-28-0	Thallium	ND		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-62-2	Vanadium	15.8		mg/kg dry	0.759	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG
7440-66-6	Zinc	22.1		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:17	CEG

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0329	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

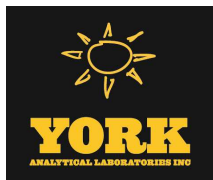
Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.2		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs



Sample Information

Client Sample ID: VHB-SB-06 (5-7)

York Sample ID: 24B0405-15

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 11:45 am

Date Received
02/07/2024

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	1.96	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-38-2	Arsenic	2.58		mg/kg dry	1.18	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-39-3	Barium	54.7		mg/kg dry	1.96	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.040	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.235	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-47-3	Chromium	12.5		mg/kg dry	0.393	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-50-8	Copper	5.15		mg/kg dry	1.57	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7439-92-1	Lead	8.19		mg/kg dry	0.393	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-02-0	Nickel	15.4		mg/kg dry	0.782	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7782-49-2	Selenium	ND		mg/kg dry	1.96	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-22-4	Silver	ND		mg/kg dry	0.395	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-28-0	Thallium	ND		mg/kg dry	1.96	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-62-2	Vanadium	30.3		mg/kg dry	0.782	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG
7440-66-6	Zinc	49.9		mg/kg dry	1.95	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:20	CEG

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0339	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.5		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-07 (5-6)

York Sample ID: 24B0405-18

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 12:00 pm

Date Received
02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

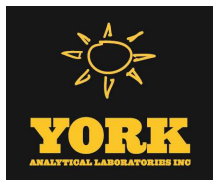
CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

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ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-07 (5-6)

York Sample ID: 24B0405-18

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 12:00 pm

Date Received
02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
120-12-7	Anthracene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
218-01-9	Chrysene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
86-73-7	Fluorene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
129-00-0	Pyrene	ND		mg/kg dry	0.666	2	EPA 8270D	02/09/2024 08:41	02/12/2024 20:45	KH
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	73.5 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	84.6 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	78.1 %	30-130							

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	74.3		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-08 (7-8)

York Sample ID: 24B0405-21

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

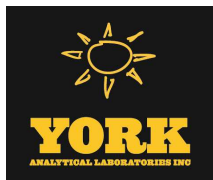
Collection Date/Time
February 6, 2024 1:40 pm

Date Received
02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:



Sample Information

Client Sample ID: VHB-SB-08 (7-8)

York Sample ID: 24B0405-21

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 1:40 pm

02/07/2024

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
95-63-6	1,2,4-Trimethylbenzene	9.4		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
78-93-3	2-Butanone	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
591-78-6	2-Hexanone	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
67-64-1	Acetone	ND	ICVE	mg/kg dry	1.2	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
107-13-1	Acrylonitrile	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
71-43-2	Benzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
108-86-1	Bromobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
74-97-5	Bromochloromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-25-2	Bromoform	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
74-83-9	Bromomethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-15-0	Carbon disulfide	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
108-90-7	Chlorobenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-00-3	Chloroethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
67-66-3	Chloroform	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

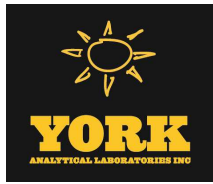
RICHMOND HILL, NY 11418

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Sample Information

Client Sample ID: VHB-SB-08 (7-8)

York Sample ID: 24B0405-21

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 1:40 pm

Date Received

02/07/2024

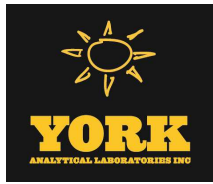
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
74-95-3	Dibromomethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-09-2	Methylene chloride	ND		mg/kg dry	1.2	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
91-20-3	Naphthalene	3.9		mg/kg dry	1.2	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
104-51-8	n-Butylbenzene	2.4		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
103-65-1	n-Propylbenzene	1.1		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
95-47-6	o-Xylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	1.2	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
135-98-8	sec-Butylbenzene	2.3		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
100-42-5	Styrene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
127-18-4	Tetrachloroethylene	ND	ICVE	mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
109-99-9	Tetrahydrofuran	ND		mg/kg dry	1.2	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
108-88-3	Toluene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
79-01-6	Trichloroethylene	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.62	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:31	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	96.3 %			70-130					
2037-26-5	Surrogate: SURR: Toluene-d8	90.0 %			70-130					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	162 %	S-04, S-08		70-130					



Sample Information

Client Sample ID: VHB-SB-08 (7-8)

York Sample ID: 24B0405-21

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 1:40 pm

02/07/2024

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	73.2		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: VHB-SB-09 (5-7)

York Sample ID: 24B0405-23

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 2:10 pm

02/07/2024

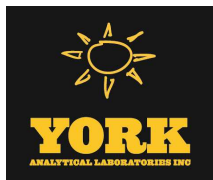
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
95-63-6	1,2,4-Trimethylbenzene	250		mg/kg dry	6.9	2000	EPA 8260C	02/15/2024 09:00	02/15/2024 16:17	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
108-67-8	1,3,5-Trimethylbenzene	89		mg/kg dry	3.5	1000	EPA 8260C	02/15/2024 09:00	02/15/2024 15:49	SMA
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
78-93-3	2-Butanone	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA



Sample Information

Client Sample ID: VHB-SB-09 (5-7)

York Sample ID: 24B0405-23

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 2:10 pm

Date Received
02/07/2024

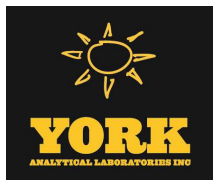
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	2-Hexanone	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
67-64-1	Acetone	ND	ICVE	mg/kg dry	1.1	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
107-13-1	Acrylonitrile	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
71-43-2	Benzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
108-86-1	Bromobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
74-97-5	Bromochloromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-25-2	Bromoform	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
74-83-9	Bromomethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-15-0	Carbon disulfide	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
108-90-7	Chlorobenzene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-00-3	Chloroethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
67-66-3	Chloroform	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
74-87-3	Chloromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
74-95-3	Dibromomethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
100-41-4	Ethyl Benzene	0.69		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
98-82-8	Isopropylbenzene	14		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-09-2	Methylene chloride	ND		mg/kg dry	1.1	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
91-20-3	Naphthalene	39		mg/kg dry	1.1	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
104-51-8	n-Butylbenzene	35		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
103-65-1	n-Propylbenzene	41		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
95-47-6	o-Xylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	1.1	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
99-87-6	p-Isopropyltoluene	41		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
135-98-8	sec-Butylbenzene	36		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
100-42-5	Styrene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
98-06-6	tert-Butylbenzene	7.9		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
127-18-4	Tetrachloroethylene	ND	ICVE	mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
109-99-9	Tetrahydrofuran	ND		mg/kg dry	1.1	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
108-88-3	Toluene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA



Sample Information

Client Sample ID: VHB-SB-09 (5-7)

York Sample ID: 24B0405-23

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 2:10 pm

Date Received
02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
79-01-6	Trichloroethylene	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.55	100	EPA 8260C	02/15/2024 09:00	02/15/2024 13:59	SMA
Surrogate Recoveries		Result		Acceptance Range						
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.5 %			70-130					
2037-26-5	Surrogate: SURR: Toluene-d8	85.8 %			70-130					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	299 %	S-04, S-08		70-130					

PCB, 8082 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 PCB-RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
11097-69-1	Aroclor 1254	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
11096-82-5	Aroclor 1260	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
37324-23-5	Aroclor 1262	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
11100-14-4	Aroclor 1268	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
1336-36-3	Total PCBs	ND		mg/kg dry	0.0326	1	EPA 8082A	02/09/2024 08:30	02/10/2024 05:11	NF
Surrogate Recoveries		Result		Acceptance Range						
877-09-8	Surrogate: Tetrachloro-m-xylene	83.0 %			30-150					
2051-24-3	Surrogate: Decachlorobiphenyl	73.0 %			30-150					

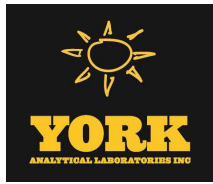
Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546 ETPH

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	2030		mg/kg dry	485	10	CT DEP ETPH	02/14/2024 09:03	02/15/2024 09:50	GXB
Surrogate Recoveries		Result		Acceptance Range						
3386-33-2	Surrogate: 1-Chlorooctadecane	67.6 %			50-150					



Sample Information

Client Sample ID: VHB-SB-09 (5-7)

York Sample ID: 24B0405-23

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 2:10 pm

Date Received

02/07/2024

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	2.27	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-38-2	Arsenic	2.66		mg/kg dry	1.37	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-39-3	Barium	108		mg/kg dry	2.27	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.046	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.273	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-47-3	Chromium	13.2		mg/kg dry	0.455	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-50-8	Copper	26.9		mg/kg dry	1.82	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7439-92-1	Lead	114		mg/kg dry	0.455	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-02-0	Nickel	14.7		mg/kg dry	0.906	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7782-49-2	Selenium	ND		mg/kg dry	2.27	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-22-4	Silver	ND		mg/kg dry	0.459	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-28-0	Thallium	ND		mg/kg dry	2.27	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-62-2	Vanadium	21.9		mg/kg dry	0.906	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG
7440-66-6	Zinc	127		mg/kg dry	2.27	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:23	CEG

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	0.301		mg/kg dry	0.0393	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	76.3		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: DUP

York Sample ID: 24B0405-26

York Project (SDG) No.

24B0405

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

February 6, 2024 3:00 pm

Date Received

02/07/2024

VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst

120 RESEARCH DRIVE

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STRATFORD, CT 06615

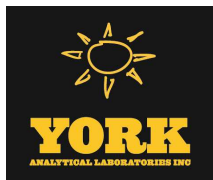
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: DUP

York Sample ID: 24B0405-26

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 3:00 pm

Date Received
02/07/2024

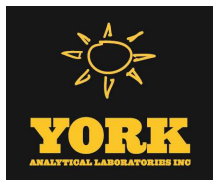
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
563-58-6	1,1-Dichloropropylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
96-18-4	1,2,3-Trichloropropane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
95-50-1	1,2-Dichlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
541-73-1	1,3-Dichlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
142-28-9	1,3-Dichloropropane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
106-46-7	1,4-Dichlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
594-20-7	2,2-Dichloropropane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
78-93-3	2-Butanone	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
95-49-8	2-Chlorotoluene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
591-78-6	2-Hexanone	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
106-43-4	4-Chlorotoluene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
67-64-1	Acetone	ND	ICVE, QL-02	mg/kg dry	0.0083	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
71-43-2	Benzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
108-86-1	Bromobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-25-2	Bromoform	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
74-83-9	Bromomethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT



Sample Information

Client Sample ID: DUP

York Sample ID: 24B0405-26

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 3:00 pm

Date Received
02/07/2024

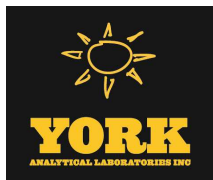
VOA, 8260 RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-00-3	Chloroethane	ND	CCVE, QL-02	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
67-66-3	Chloroform	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
74-87-3	Chloromethane	ND	CCVE	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
74-95-3	Dibromomethane	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-71-8	Dichlorodifluoromethane	ND	CCVE	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
87-68-3	Hexachlorobutadiene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
98-82-8	Isopropylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
80-62-6	Methyl Methacrylate	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-09-2	Methylene chloride	0.013		mg/kg dry	0.0083	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
91-20-3	Naphthalene	ND		mg/kg dry	0.0083	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
104-51-8	n-Butylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
103-65-1	n-Propylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
95-47-6	o-Xylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0083	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
99-87-6	p-Isopropyltoluene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
135-98-8	sec-Butylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
100-42-5	Styrene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
98-06-6	tert-Butylbenzene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
127-18-4	Tetrachloroethylene	ND	ICVE	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
109-99-9	Tetrahydrofuran	ND		mg/kg dry	0.0083	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
108-88-3	Toluene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-69-4	Trichlorofluoromethane	ND	CCVE	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
75-01-4	Vinyl Chloride	ND	CCVE	mg/kg dry	0.0042	1	EPA 8260C	02/14/2024 09:00	02/14/2024 17:27	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	94.4 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	95.6 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	112 %	70-130							



Sample Information

Client Sample ID: DUP

York Sample ID: 24B0405-26

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
February 6, 2024 3:00 pm

Date Received
02/07/2024

SVOA, 8270 ASE RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3546- SVOA RCP

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
83-32-9	Acenaphthene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
208-96-8	Acenaphthylene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
120-12-7	Anthracene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
56-55-3	Benzo(a)anthracene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
50-32-8	Benzo(a)pyrene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
205-99-2	Benzo(b)fluoranthene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
191-24-2	Benzo(g,h,i)perylene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
207-08-9	Benzo(k)fluoranthene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
218-01-9	Chrysene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
53-70-3	Dibenzo(a,h)anthracene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
206-44-0	Fluoranthene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
86-73-7	Fluorene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
193-39-5	Indeno(1,2,3-cd)pyrene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
91-20-3	Naphthalene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
85-01-8	Phenanthrene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
129-00-0	Pyrene	ND		mg/kg dry	0.542	2	EPA 8270D	02/09/2024 08:41	02/12/2024 21:15	KH
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	75.8 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	81.4 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	83.4 %	30-130							

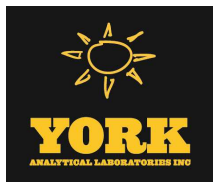
Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-38-2	Arsenic	2.34		mg/kg dry	1.14	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-39-3	Barium	28.4	M-CCV1	mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-41-7	Beryllium	ND		mg/kg dry	0.038	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-43-9	Cadmium	ND		mg/kg dry	0.228	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-47-3	Chromium	12.2		mg/kg dry	0.381	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-50-8	Copper	8.16		mg/kg dry	1.52	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7439-92-1	Lead	12.7		mg/kg dry	0.381	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-02-0	Nickel	13.1		mg/kg dry	0.757	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7782-49-2	Selenium	ND		mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-22-4	Silver	ND		mg/kg dry	0.383	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-28-0	Thallium	ND	M-CCV1	mg/kg dry	1.90	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG
7440-62-2	Vanadium	19.8		mg/kg dry	0.757	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG



Sample Information

Client Sample ID: DUP

York Sample ID: 24B0405-26

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Soil

February 6, 2024 3:00 pm

02/07/2024

Metals, CTDEP RCP

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3050B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-66-6	Zinc	26.1		M-CCV1 mg/kg dry	1.89	1	EPA 6010D	02/09/2024 13:47	02/12/2024 20:33	CEG

Mercury by 7473

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 soil

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/kg dry	0.0328	1	EPA 7473	02/14/2024 15:31	02/14/2024 22:22	AGNR

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	91.3		%	0.100	1	SM 2540G	02/15/2024 07:35	02/15/2024 15:42	sgs

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24B0405-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24B0405

43340 - Hempstead Park

Water

February 6, 2024 3:00 pm

02/07/2024

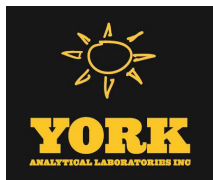
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24B0405-27

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Water

Collection Date/Time
February 6, 2024 3:00 pm

Date Received
02/07/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
78-93-3	2-Butanone	ND	CCVE, ICVE, QL-02	ug/L	1.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
591-78-6	2-Hexanone	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
67-64-1	Acetone	ND	CCVE, ICVE, QL-02	ug/L	2.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
67-66-3	Chloroform	ND	CCVE	ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA

120 RESEARCH DRIVE

STRATFORD, CT 06615

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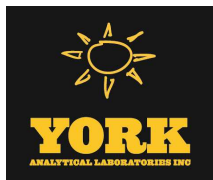
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24B0405-27

York Project (SDG) No.
24B0405

Client Project ID
43340 - Hempstead Park

Matrix
Water

Collection Date/Time
February 6, 2024 3:00 pm

Date Received
02/07/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
127-18-4	Tetrachloroethylene	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
109-99-9	Tetrahydrofuran	ND	ICVE	ug/L	4.00	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	02/09/2024 09:00	02/09/2024 20:50	SMA
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	97.9 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	114 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	109 %	70-130							



REASONABLE CONFIDENCE PROTOCOL

LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: York Analytical Laboratories, Inc. - Strat Client: VHB
Project Location: 43340 - Hempstead Park Lab Project No.: 24B0405
Laboratory Sample ID(s): 24B0405-01 - 24B0405-27 Sampling Date(s): 02/06/2024 - 02/06/2024
RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A	Were the method specified preservation and holding time requirements met?	YES
1B	VPH and EPH Methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	NR
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	YES
3	Were samples received at an appropriate temperature ($\leq$ or $= 6^{\circ}\text{C}$)?	YES
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	NO
5A	Were reporting limits specified or referenced on the chain-of-custody?	YES
5B	Were these reporting limits met?	YES
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to questions #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized
Signature:

Position: Laboratory Manager

Printed Name: Cassie L. Mosher

Date: 03/08/2024





York Narrative- CTDEEP RCP Introduction

This Work Order Narrative includes the following items for full review of any quality issues encountered with samples and their analyses for the parameters requested:

1. Sample Receipt Information, including a Sample Summary which cross references your sample ID with York Analytical sample ID, identifying the matrix and Date/Time collected and received at York.
2. Analysis Methodologies employed for the work order
3. Any Sample Issues encountered such as Holding time exceedances, improper containers/preservation, or any related issue with sample integrity
4. Specific Analysis Findings in order: Volatiles, Semi-Volatiles, Pesticides/PCBs, Herbicides, other GC parameters, Metals, Mercury, Wet Chemistry.
5. Analysis Findings Include:
 - BIAS Summary Report-Multiple Lines of Evidence
 - Analyte qualifier summary
 - Samples and associated Calibration Curve(s)
 - Calibration Outliers Discussion/Tabular presentation and affected samples
 - Initial Calibration Verification (ICV) information
 - Batch QC Sample Performance (Blanks, Blank Spikes (BS), MS/MSD)
 - Internal Standard Performance
 - Surrogate Performance
 - Example Calculations

Work Order Narrative

York Analytical Work Order No.: 24B0405

Client : VHB

Client Project ID : 43340 - Hempstead Park

Prepared for : Pamela Lind

1.0) Introduction

This work order Narrative applies to the following samples submitted to our laboratory on: 02/07/2024 3:40 PM

27 sample(s) were received intact in a custody-sealed cooler(s) unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ($\leq 6^{\circ}\text{C}$) and documented as: {4.4}°C

Sample Summary

<u>SampleName</u>	<u>Lab Number</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
VHB-SB-01 (1.2-1.6)	24B0405-01	Soil	02/06/2024 9:10 AM	02/07/2024 3:40 PM
VHB-SB-01 (2.7-3.6)	24B0405-02	Soil	02/06/2024 9:15 AM	02/07/2024 3:40 PM
VHB-SB-01 (2.9-3.9)	24B0405-03	Soil	02/06/2024 9:40 AM	02/07/2024 3:40 PM
VHB-SB-02 (5-7)	24B0405-04	Soil	02/06/2024 9:25 AM	02/07/2024 3:40 PM
VHB-SB-02 (10-12)	24B0405-05	Soil	02/06/2024 9:30 AM	02/07/2024 3:40 PM
VHB-SB-03 (2-2.2)	24B0405-06	Soil	02/06/2024 10:02 AM	02/07/2024 3:40 PM
VHB-SB-03 (5.5-6.7)	24B0405-07	Soil	02/06/2024 10:00 AM	02/07/2024 3:40 PM
VHB-SB-03 (10-11)	24B0405-08	Soil	02/06/2024 10:05 AM	02/07/2024 3:40 PM
VHB-SB-04 (3-3.5)	24B0405-09	Soil	02/06/2024 10:30 AM	02/07/2024 3:40 PM
VHB-SB-04 (5-7)	24B0405-10	Soil	02/06/2024 10:40 AM	02/07/2024 3:40 PM
VHB-SB-05 (1-2)	24B0405-11	Soil	02/06/2024 10:55 AM	02/07/2024 3:40 PM
VHB-SB-05 (5-6.4)	24B0405-12	Soil	02/06/2024 11:00 AM	02/07/2024 3:40 PM
VHB-SB-05 (6.4-7.5)	24B0405-13	Soil	02/06/2024 11:05 AM	02/07/2024 3:40 PM
VHB-SB-06 (0.3-2.1)	24B0405-14	Soil	02/06/2024 11:30 AM	02/07/2024 3:40 PM
VHB-SB-06 (5-7)	24B0405-15	Soil	02/06/2024 11:45 AM	02/07/2024 3:40 PM
VHB-SB-06 (10-11)	24B0405-16	Soil	02/06/2024 11:50 AM	02/07/2024 3:40 PM
VHB-SB-07 (2-3.6)	24B0405-17	Soil	02/06/2024 12:05 PM	02/07/2024 3:40 PM
VHB-SB-07 (5-6)	24B0405-18	Soil	02/06/2024 12:00 PM	02/07/2024 3:40 PM
VHB-SB-07 (7-7.9)	24B0405-19	Soil	02/06/2024 12:10 PM	02/07/2024 3:40 PM
VHB-SB-07 (7.9-8.6)	24B0405-20	Soil	02/06/2024 12:15 PM	02/07/2024 3:40 PM
VHB-SB-08 (7-8)	24B0405-21	Soil	02/06/2024 1:40 PM	02/07/2024 3:40 PM
VHB-SB-09 (1-2.5)	24B0405-22	Soil	02/06/2024 2:05 PM	02/07/2024 3:40 PM
VHB-SB-09 (5-7)	24B0405-23	Soil	02/06/2024 2:10 PM	02/07/2024 3:40 PM
VHB-SB-10 (1-1.7)	24B0405-24	Soil	02/06/2024 2:20 PM	02/07/2024 3:40 PM
VHB-SB-10 (5-6)	24B0405-25	Soil	02/06/2024 2:30 PM	02/07/2024 3:40 PM
DUP	24B0405-26	Soil	02/06/2024 3:00 PM	02/07/2024 3:40 PM
Trip Blank	24B0405-27	Water	02/06/2024 3:00 PM	02/07/2024 3:40 PM

WorkOrder Comments

York Analytical Work Order Narrative

2.0 Methodology

<u>Analysis Class</u>	<u>Preparation Method</u>	<u>Analysis Methodology</u>
		SW8082A
		SW846-%Solid
VOA	EPA 5030B	EPA 8260C
VOA	EPA 5035A	EPA 8260C
SVOA	% Solids Prep	EPA 8270D
SVOA	EPA 3545A	EPA 8270D
ARO	EPA 3545A	EPA 8082A
ARO	EPA SW846-3540C	EPA 8082A
GC	EPA 3545A	CT DEP ETPH
METALS	EPA 3050B	EPA 6010D
HG	EPA 7473 soil	EPA 7473
WET	% Solids Prep	SM 2540G

Analyte List

Method	Analyte
CT DEP ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)
EPA 6010D	Antimony ; Arsenic ; Barium ; Beryllium ; Cadmium ; Chromium ; Copper ; Lead ; Nickel ; Selenium ; Silver ; Thallium ; Vanadium ; Zinc
EPA 7473	Mercury
EPA 8082A	Aroclor 1016 ; Aroclor 1221 ; Aroclor 1232 ; Aroclor 1242 ; Aroclor 1248 ; Aroclor 1254 ; Aroclor 1260 ; Aroclor 1262 ; Aroclor 1268 ; PCB-1016 ; PCB-1221 ; PCB-1232 ; PCB-1242 ; PCB-1248 ; PCB-1254 ; PCB-1260 ; PCB-1262 ; PCB-1268 ; Total PCBs
EPA 8260C	1,1,1,2-Tetrachloroethane ; 1,1,1-Trichloroethane ; 1,1,2,2-Tetrachloroethane ; 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) ; 1,1,2-Trichloroethane ; 1,1-Dichloroethane ; 1,1-Dichloroethylene ; 1,1-Dichloropropylene ; 1,2,3-Trichlorobenzene ; 1,2,3-Trichloropropane ; 1,2,4-Trichlorobenzene ; 1,2,4-Trimethylbenzene ; 1,2-Dibromo-3-chloropropane ; 1,2-Dibromoethane ; 1,2-Dichlorobenzene ; 1,2-Dichloroethane ; 1,2-Dichloropropane ; 1,3,5-Trimethylbenzene ; 1,3-Dichlorobenzene ; 1,3-Dichloropropane ; 1,4-Dichlorobenzene ; 2,2-Dichloropropane ; 2-Butanone ; 2-Chlorotoluene ; 2-Hexanone ; 4-Chlorotoluene ; 4-Methyl-2-pentanone ; Acetone ; Acrylonitrile ; Benzene ; Bromobenzene ; Bromochloromethane ; Bromodichloromethane ; Bromoform ; Bromomethane ; Carbon disulfide ; Carbon tetrachloride ; Chlorobenzene ; Chloroethane ; Chloroform ; Chloromethane ; cis-1,2-Dichloroethylene ; cis-1,3-Dichloropropylene ; Dibromochloromethane ; Dibromomethane ; Dichlorodifluoromethane ; Ethyl Benzene ; Hexachlorobutadiene ; Isopropylbenzene ; Methyl Methacrylate ; Methyl tert-butyl ether (MTBE) ; Methylene chloride ; Naphthalene ; n-Butylbenzene ; n-Propylbenzene ; o-Xylene ; p- & m-Xylenes ; p-Isopropyltoluene ; sec-Butylbenzene ; Styrene ; tert-Butylbenzene ; Tetrachloroethylene ; Tetrahydrofuran ; Toluene ; trans-1,2-Dichloroethylene ; trans-1,3-Dichloropropylene ; trans-1,4-dichloro-2-butene ; Trichloroethylene ; Trichlorofluoromethane ; Vinyl Chloride
EPA 8270D	1,2,4,5-Tetrachlorobenzene ; 1,2,4-Trichlorobenzene ; 1-Methylnaphthalene ; 2,4,5-Trichlorophenol ; 2,4,6-Trichlorophenol ; 2,4-Dichlorophenol ; 2,4-Dimethylphenol ; 2,4-Dinitrophenol ; 2,4-Dinitrotoluene ; 2,6-Dinitrotoluene ; 2-Chloronaphthalene ; 2-Chlorophenol ; 2-Methylnaphthalene ; 2-Methylphenol ; 2-Nitroaniline ; 2-Nitrophenol ; 3- & 4-Methylphenols ; 3,3-Dichlorobenzidine ; 3-Nitroaniline ; 4,6-Dinitro-2-methylphenol ; 4-Bromophenyl phenyl ether ; 4-Chloro-3-methylphenol ; 4-Chloroaniline ; 4-Chlorophenyl phenyl ether ; 4-Nitroaniline ; 4-Nitrophenol ; Acenaphthene ; Acenaphthylene ; Aniline ; Anthracene ; Benzo(a)anthracene ; Benzo(a)pyrene ; Benzo(b)fluoranthene ; Benzo(g,h,i)perylene ; Benzo(k)fluoranthene ; Benzyl butyl phthalate ; Bis(2-chloroethoxy)methane ; Bis(2-chloroethyl)ether ; Bis(2-chloroisopropyl)ether ; Bis(2-ethylhexyl)phthalate ; Carbazole ; Chrysene ; Dibenzo(a,h)anthracene ; Dibenzofuran ; Diethyl phthalate ; Dimethyl phthalate ; Di-n-butyl phthalate ; Di-n-octyl phthalate ; Fluoranthene ; Fluorene ; Hexachlorobenzene ; Hexachlorobutadiene ; Hexachlorocyclopentadiene ; Hexachloroethane ; Indeno(1,2,3-cd)pyrene ; Isophorone ; Naphthalene ; Nitrobenzene ; N-nitroso-di-n-propylamine ; N-Nitrosodiphenylamine ; Pentachloronitrobenzene ; Pentachlorophenol ; Phenanthrene ; Phenol ; Pyrene ; Pyridine
SM 2540G	% Solids

York Analytical Work Order Narrative

SW8082A

Aroclor 1016 ; Aroclor 1221 ; Aroclor 1232 ; Aroclor 1242 ; Aroclor 1248 ; Aroclor 1254 ; Aroclor 1260 ;
Aroclor 1262 ; Aroclor 1268 ; PCB-1016 ; PCB-1221 ; PCB-1232 ; PCB-1242 ; PCB-1248 ; PCB-1254 ; PCB-
1260 ; PCB-1262 ; PCB-1268 ; Total PCBs

SW846-%Solid

Percent Solid

3.0 Sample Issues

No issues were encountered with the samples submitted other than those detailed below.

York Analytical Work Order Narrative

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
METALS	24B0405-02	VHB-SB-01 (2.7-3.6)	Antimony		high				
METALS	24B0405-02	VHB-SB-01 (2.7-3.6)	Selenium		high	Low			
METALS	24B0405-02	VHB-SB-01 (2.7-3.6)	Thallium		high				
METALS	24B0405-11	VHB-SB-05 (1-2)	Barium		high				
METALS	24B0405-11	VHB-SB-05 (1-2)	Beryllium		high				
METALS	24B0405-11	VHB-SB-05 (1-2)	Cadmium		high				
METALS	24B0405-11	VHB-SB-05 (1-2)	Nickel			high			
METALS	24B0405-11	VHB-SB-05 (1-2)	Selenium		high	Low			
METALS	24B0405-11	VHB-SB-05 (1-2)	Thallium		Low				
METALS	24B0405-11	VHB-SB-05 (1-2)	Zinc		high				
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Barium		high				
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Beryllium		high				
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Cadmium		high				
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Nickel			high			
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Selenium		high	Low			
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Thallium		Low				
METALS	24B0405-12	VHB-SB-05 (5-6.4)	Zinc		high				
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Barium		high				
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Beryllium		high				
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Cadmium		high				
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Nickel			high			
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Selenium		high	Low			
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Thallium		Low				
METALS	24B0405-14	VHB-SB-06 (0.3-2.1)	Zinc		high				
METALS	24B0405-15	VHB-SB-06 (5-7)	Barium		high				
METALS	24B0405-15	VHB-SB-06 (5-7)	Beryllium		high				
METALS	24B0405-15	VHB-SB-06 (5-7)	Cadmium		high				
METALS	24B0405-15	VHB-SB-06 (5-7)	Nickel			high			
METALS	24B0405-15	VHB-SB-06 (5-7)	Selenium		high	Low			
METALS	24B0405-15	VHB-SB-06 (5-7)	Thallium		Low				
METALS	24B0405-15	VHB-SB-06 (5-7)	Zinc		high				
METALS	24B0405-23	VHB-SB-09 (5-7)	Barium		high				
METALS	24B0405-23	VHB-SB-09 (5-7)	Beryllium		high				
METALS	24B0405-23	VHB-SB-09 (5-7)	Cadmium		high				
METALS	24B0405-23	VHB-SB-09 (5-7)	Nickel			high			
METALS	24B0405-23	VHB-SB-09 (5-7)	Selenium		high	Low			

York Analytical Work Order Narrative

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
METALS	24B0405-23	VHB-SB-09 (5-7)	Thallium		Low				
METALS	24B0405-23	VHB-SB-09 (5-7)	Zinc		high				
METALS	24B0405-26	DUP	Barium		high				
METALS	24B0405-26	DUP	Beryllium		high				
METALS	24B0405-26	DUP	Cadmium		high				
METALS	24B0405-26	DUP	Nickel			high			
METALS	24B0405-26	DUP	Selenium		high	Low			
METALS	24B0405-26	DUP	Thallium		Low				
METALS	24B0405-26	DUP	Zinc		high				

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Acetone	Low					
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Bromomethane		high	high			
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Chloroethane			high			
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Chloroform		high				
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Dichlorodifluoromethane	Low		high			
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Trichlorofluoromethane		high	high			
VOA	24B0405-09	VHB-SB-04 (3-3.5)	Vinyl Chloride		high				
VOA	24B0405-11	VHB-SB-05 (1-2)	1,2-Dibromo-3-chloropropane		Low				
VOA	24B0405-11	VHB-SB-05 (1-2)	2-Hexanone		Low				
VOA	24B0405-11	VHB-SB-05 (1-2)	Acetone	Low					
VOA	24B0405-11	VHB-SB-05 (1-2)	Dichlorodifluoromethane	Low	Low				
VOA	24B0405-11	VHB-SB-05 (1-2)	Naphthalene		Low				
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Acetone	Low		Low			
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Bromomethane	high					
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Chloroethane		Low	Low			
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Chloromethane		Low				
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Dichlorodifluoromethane		Low				
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Tetrachloroethylene	Low					
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Trichlorofluoromethane		Low				
VOA	24B0405-14	VHB-SB-06 (0.3-2.1)	Vinyl Chloride		Low				
VOA	24B0405-21	VHB-SB-08 (7-8)	Acetone	Low	high				
VOA	24B0405-21	VHB-SB-08 (7-8)	Dichlorodifluoromethane			high			
VOA	24B0405-21	VHB-SB-08 (7-8)	Tetrachloroethylene	Low					
VOA	24B0405-23	VHB-SB-09 (5-7)	Acetone	Low	high				
VOA	24B0405-23	VHB-SB-09 (5-7)	Dichlorodifluoromethane			high			

York Analytical Work Order Narrative

CT DEEP Reasonable Confidence Protocol

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24B0405-23	VHB-SB-09 (5-7)	Tetrachloroethylene	Low					
VOA	24B0405-26	DUP	Acetone	Low		Low			
VOA	24B0405-26	DUP	Bromomethane	high					
VOA	24B0405-26	DUP	Chloroethane		Low	Low			
VOA	24B0405-26	DUP	Chloromethane		Low				
VOA	24B0405-26	DUP	Dichlorodifluoromethane		Low				
VOA	24B0405-26	DUP	Tetrachloroethylene	Low					
VOA	24B0405-26	DUP	Trichlorofluoromethane		Low				
VOA	24B0405-26	DUP	Vinyl Chloride		Low				
VOA	24B0405-27	Trip Blank	2-Butanone	Low	Low	Low			
VOA	24B0405-27	Trip Blank	2-Hexanone	Low		Low			
VOA	24B0405-27	Trip Blank	Acetone	Low	Low	Low			
VOA	24B0405-27	Trip Blank	Chloroform		Low				
VOA	24B0405-27	Trip Blank	Tetrachloroethylene	Low	Low	Low			
VOA	24B0405-27	Trip Blank	Tetrahydrofuran	Low					

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
DUP	EPA 6010D	24B0405-26	Soil	Barium	M-CCV1
DUP	EPA 6010D	24B0405-26	Soil	Thallium	M-CCV1
DUP	EPA 6010D	24B0405-26	Soil	Zinc	M-CCV1
VHB-SB-04 (3-3.5)	EPA 8260C	24B0405-09	Soil	Acetone	ICVE
VHB-SB-04 (3-3.5)	EPA 8260C	24B0405-09	Soil	Dichlorodifluoromethane	ICVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	1,2-Dibromo-3-chloropropane	CCVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	2-Hexanone	CCVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	Acetone	ICVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	Dichlorodifluoromethane	ICVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	Dichlorodifluoromethane	CCVE
VHB-SB-05 (1-2)	EPA 8260C	24B0405-11	Soil	Naphthalene	CCVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Acetone	ICVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Acetone	QL-02
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Chloroethane	CCVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Chloroethane	QL-02
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Chloromethane	CCVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Dichlorodifluoromethane	CCVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Tetrachloroethylene	ICVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Trichlorofluoromethane	CCVE
VHB-SB-06 (0.3-2.1)	EPA 8260C	24B0405-14	Soil	Vinyl Chloride	CCVE
VHB-SB-08 (7-8)	EPA 8260C	24B0405-21	Soil	Acetone	ICVE
VHB-SB-08 (7-8)	EPA 8260C	24B0405-21	Soil	SURR: p-Bromofluorobenzene	S-04
VHB-SB-08 (7-8)	EPA 8260C	24B0405-21	Soil	SURR: p-Bromofluorobenzene	S-08
VHB-SB-08 (7-8)	EPA 8260C	24B0405-21	Soil	Tetrachloroethylene	ICVE
VHB-SB-09 (5-7)	EPA 8260C	24B0405-23	Soil	Acetone	ICVE
VHB-SB-09 (5-7)	EPA 8260C	24B0405-23	Soil	SURR: p-Bromofluorobenzene	S-04
VHB-SB-09 (5-7)	EPA 8260C	24B0405-23	Soil	SURR: p-Bromofluorobenzene	S-08
VHB-SB-09 (5-7)	EPA 8260C	24B0405-23	Soil	Tetrachloroethylene	ICVE
DUP	EPA 8260C	24B0405-26	Soil	Acetone	ICVE
DUP	EPA 8260C	24B0405-26	Soil	Acetone	QL-02
DUP	EPA 8260C	24B0405-26	Soil	Chloroethane	QL-02
DUP	EPA 8260C	24B0405-26	Soil	Chloroethane	CCVE
DUP	EPA 8260C	24B0405-26	Soil	Chloromethane	CCVE
DUP	EPA 8260C	24B0405-26	Soil	Dichlorodifluoromethane	CCVE
DUP	EPA 8260C	24B0405-26	Soil	Tetrachloroethylene	ICVE
DUP	EPA 8260C	24B0405-26	Soil	Trichlorofluoromethane	CCVE
DUP	EPA 8260C	24B0405-26	Soil	Vinyl Chloride	CCVE
Trip Blank	EPA 8260C	24B0405-27	Water	2-Butanone	CCVE
Trip Blank	EPA 8260C	24B0405-27	Water	2-Butanone	QL-02
Trip Blank	EPA 8260C	24B0405-27	Water	2-Butanone	ICVE
Trip Blank	EPA 8260C	24B0405-27	Water	2-Hexanone	QL-02
Trip Blank	EPA 8260C	24B0405-27	Water	2-Hexanone	ICVE
Trip Blank	EPA 8260C	24B0405-27	Water	Acetone	CCVE
Trip Blank	EPA 8260C	24B0405-27	Water	Acetone	ICVE

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
Trip Blank	EPA 8260C	24B0405-27	Water	Acetone	QL-02
Trip Blank	EPA 8260C	24B0405-27	Water	Chloroform	CCVE
Trip Blank	EPA 8260C	24B0405-27	Water	Tetrachloroethylene	QL-02
Trip Blank	EPA 8260C	24B0405-27	Water	Tetrachloroethylene	CCVE
Trip Blank	EPA 8260C	24B0405-27	Water	Tetrachloroethylene	ICVE
Trip Blank	EPA 8260C	24B0405-27	Water	Tetrahydrofuran	ICVE
	EPA 8260C	S3L1333-SCV1	Soil	Acetone	ICVE
	EPA 8260C	S3L1333-SCV1	Soil	Acetone	ICVE20
	EPA 8260C	S3L1333-SCV1	Soil	Dichlorodifluoromethane	ICVE20
	EPA 8260C	S3L1333-SCV1	Soil	Dichlorodifluoromethane	ICVE
	EPA 8260C	S4B0632-SCV1	Soil	Acetone	ICVE
	EPA 8260C	S4B0632-SCV1	Soil	Tetrachloroethylene	ICVE
	EPA 8260C	S4B0632-SCV1	Soil	Tetrachloroethylene	ICVE20
	EPA 8260C	S4B0637-SCV1	Soil	Acetone	ICVE
	EPA 8260C	S4B0637-SCV1	Soil	Bromomethane	ICVE
	EPA 8260C	S4B0637-SCV1	Soil	Tetrachloroethylene	ICVE
	EPA 8260C	S4B0836-SCV1	Water	2-Butanone	ICVE
	EPA 8260C	S4B0836-SCV1	Water	2-Hexanone	ICVE
	EPA 8260C	S4B0836-SCV1	Water	Acetone	ICVE
	EPA 8260C	S4B0836-SCV1	Water	Acetone	ICVE20
	EPA 8260C	S4B0836-SCV1	Water	Tetrachloroethylene	ICVE
	EPA 8260C	S4B0836-SCV1	Water	Tetrachloroethylene	ICVE20
	EPA 8260C	S4B0836-SCV1	Water	Tetrahydrofuran	ICVE

Qualifier Definitions :

CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) was outside the 90-110% recovery criteria.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
S-08	The recovery of this surrogate was outside of QC limits.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SB40008**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SB40008	S4B0632	S4B0632	Secondary Cal Check	S4B0632-SCV1	MS VOA 2	V2626708.D
SB40008	S4B1548	S4B1548	Calibration Check	S4B1548-CCV2	MS VOA 2	V2626931.D
SB40008	BB40848	S4B1548	LCS	BB40848-BS2	MS VOA 2	V2626934.D
SB40008	BB40848	S4B1548	LCS Dup	BB40848-BSD2	MS VOA 2	V2626935.D
SB40008	BB40848	S4B1548	Blank	BB40848-BLK2	MS VOA 2	V2626937.D
SB40008	BB40848	S4B1548	VHB-SB-08 (7-8)	24B0405-21	MS VOA 2	V2626938.D
SB40008	BB40848	S4B1548	VHB-SB-09 (5-7)	24B0405-23	MS VOA 2	V2626939.D
SB40008	BB40848	S4B1548	VHB-SB-09 (5-7)	24B0405-23RE1	MS VOA 2	V2626943.D
SB40008	BB40848	S4B1548	VHB-SB-09 (5-7)	24B0405-23RE2	MS VOA 2	V2626944.D

Initial calibration for EPA 8260C met method guidelines.

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SB40008	S4B0632-SCV1	Acetone	50.0	38.4	76.8	80 - 120
SB40008	S4B0632-SCV1	Tetrachloroethylene	50.0	34.6	69.1	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1548-CCV2	Calibration Check	V2626931.D
BB40848-BS2	LCS	V2626934.D
BB40848-BSD2	LCS Dup	V2626935.D
BB40848-BLK2	Blank	V2626937.D
24B0405-21	VHB-SB-08 (7-8)	V2626938.D
24B0405-23	VHB-SB-09 (5-7)	V2626939.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SB40008	S4B1548	S4B1548-CCV2	V2626931.D	02/15/24 10:07

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SB40008	S4B1548-CCV2	Acetone	ug/L	67.7	50.0	135	70 130	V2626931.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SB40008	S4B1548	BB40848-BS2	LCS		V2626934.D
SB40008	S4B1548	BB40848-BSD2	LCS Dup		V2626935.D

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BB40848	S4B1548	MS VOA 2	BB40848-BLK2	V2626937.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SB40008	4B1548	BB40848-BS2	LCS	V2626934.D
SB40008	4B1548	BB40848-BSD2	LCS Dup	V2626935.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4B1548	LCS	BB40848-BS2	Dichlorodifluoromethane		151		70 - 130	
S4B1548	LCS Dup	BB40848-BSD2	Dichlorodifluoromethane	151	155	2.56	70 - 130	30

York Analytical Work Order Narrative

EPA 8260C

Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
EPA 8260C	BB40848	VHB-SB-08 (7-8)	24B0405-21	100
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23	100
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE1	1000
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE2	2000

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SB40008	VHB-SB-08 (7-8)	24B0405-21	SURR: p-Bromofluorobenzene	162	70 - 130
SB40008	VHB-SB-09 (5-7)	24B0405-23	SURR: p-Bromofluorobenzene	299	70 - 130

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SB40009

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SB40009	S4B0637	S4B0637	Secondary Cal Check	S4B0637-SCV1	MS VOA 2	V2626695.D
SB40009	S4B1517	S4B1517	Calibration Check	S4B1517-CCV1	MS VOA 2	V2626883.D
SB40009	BB40782	S4B1517	LCS	BB40782-BS1	MS VOA 2	V2626885.D
SB40009	BB40782	S4B1517	LCS Dup	BB40782-BSD1	MS VOA 2	V2626886.D
SB40009	BB40782	S4B1517	Blank	BB40782-BLK1	MS VOA 2	V2626889.D
SB40009	BB40782	S4B1517	VHB-SB-06 (0.3-2.1)	24B0405-14	MS VOA 2	V2626891.D
SB40009	BB40782	S4B1517	DUP	24B0405-26	MS VOA 2	V2626899.D

Initial calibration for EPA 8260C met method guidelines.

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SB40009	S4B0637-SCV1	Acetone	50.0	38.9	77.7	80 - 120
SB40009	S4B0637-SCV1	Bromomethane	50.0	61.5	123	80 - 120
SB40009	S4B0637-SCV1	Tetrachloroethylene	50.0	37.9	75.8	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1517-CCV1	Calibration Check	V2626883.D
BB40782-BS1	LCS	V2626885.D
BB40782-BSD1	LCS Dup	V2626886.D
BB40782-BLK1	Blank	V2626889.D
24B0405-14	VHB-SB-06 (0.3-2.1)	V2626891.D
24B0405-26	DUP	V2626899.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SB40009	S4B1517	S4B1517-CCV1	V2626883.D	02/14/24 09:47

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SB40009	S4B1517-CCV1	Chloroethane	ug/L	31.8	50.0	63.7	70 130	V2626883.D
SB40009	S4B1517-CCV1	Chloromethane	ug/L	33.4	50.0	66.8	70 130	V2626883.D
SB40009	S4B1517-CCV1	Dichlorodifluoromethane	ug/L	25.4	50.0	50.7	70 130	V2626883.D
SB40009	S4B1517-CCV1	Trichlorofluoromethane	ug/L	34.0	50.0	68	70 130	V2626883.D
SB40009	S4B1517-CCV1	Vinyl Chloride	ug/L	34.1	50.0	68.3	80 120	V2626883.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SB40009	S4B1517	BB40782-BS1	LCS		V2626885.D
SB40009	S4B1517	BB40782-BSD1	LCS Dup		V2626886.D
SB40009	S4B1517	BB40782-BLK1	Blank		V2626889.D
SB40009	S4B1517	24B0405-14	VHB-SB-06 (0.3-2.1)		V2626891.D
SB40009	S4B1517	24B0405-26	DUP		V2626899.D

York Analytical Work Order Narrative

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BB40782	S4B1517	MS VOA 2	BB40782-BLK1	V2626889.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SB40009	4B1517	BB40782-BS1	LCS	V2626885.D
SB40009	4B1517	BB40782-BSD1	LCS Dup	V2626886.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4B1517	LCS	BB40782-BS1	Acetone		67.6		70 - 130	
S4B1517	LCS	BB40782-BS1	Chloroethane		67.5		70 - 130	
S4B1517	LCS Dup	BB40782-BSD1	Acetone	67.6	69.4	2.6	70 - 130	30
S4B1517	LCS Dup	BB40782-BSD1	Chloroethane	67.5	68	0.679	70 - 130	30

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BB40782	24B0405-14	VHB-SB-06 (0.3-2.1)	
BB40782	24B0405-26	DUP	
BB40782	BB40782-BLK1	Blank	

EPA 8260C

Dilutions:

	SpecificMethod	Batch	SampleName	LabNumber	Dilution
	EPA 8260C	BB40848	VHB-SB-08 (7-8)	24B0405-21	100
	EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23	100
	EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE1	1000
	EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE2	2000

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP LOW MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SB40012

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SB40012	S4B0836	S4B0836	Secondary Cal Check	S4B0836-SCV1	MSVOA7	V748535.D
SB40012	S4B1229	S4B1229	Calibration Check	S4B1229-CCV1	MSVOA7	V748541.D
SB40012	BB40609	S4B1229	LCS	BB40609-BS1	MSVOA7	V748542.D
SB40012	BB40609	S4B1229	LCS Dup	BB40609-BSD1	MSVOA7	V748543.D
SB40012	BB40609	S4B1229	Blank	BB40609-BLK1	MSVOA7	V748545.D
SB40012	BB40609	S4B1229	Trip Blank	24B0405-27	MSVOA7	V748553.D

Initial calibration for EPA 8260C exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SB40012	MSVOA7	2/7/2024 8:00:45 AM	V748523.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
1,2-Dibromo-3-chloropropane		15	0.0468	0.05				QR0
Tetrahydrofuran	11.66	15	0.0477	0.05				Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4B0836-SCV1		V748535.D
Calibration Check	S4B1229-CCV1		V748541.D
LCS	BB40609-BS1		V748542.D
LCS Dup	BB40609-BSD1		V748543.D
Blank	BB40609-BLK1		V748545.D
Trip Blank	24B0405-27		V748553.D

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SB40012	S4B0836-SCV1	2-Butanone	10.0	6.68	66.8	80 - 120
SB40012	S4B0836-SCV1	2-Hexanone	10.0	6.85	68.5	80 - 120
SB40012	S4B0836-SCV1	Acetone	10.0	5.62	56.2	80 - 120
SB40012	S4B0836-SCV1	Tetrachloroethylene	10.0	5.39	53.9	80 - 120
SB40012	S4B0836-SCV1	Tetrahydrofuran	10.0	7.42	74.2	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1229-CCV1	Calibration Check	V748541.D
BB40609-BS1	LCS	V748542.D
BB40609-BSD1	LCS Dup	V748543.D
BB40609-BLK1	Blank	V748545.D
24B0405-27	Trip Blank	V748553.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SB40012	S4B1229	S4B1229-CCV1	V748541.D	02/09/24 14:37

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SB40012	S4B1229-CCV1	2-Butanone	ug/L	6.68	10.0	66.8	70 130	V748541.D
SB40012	S4B1229-CCV1	Acetone	ug/L	6.51	10.0	65.1	70 130	V748541.D
SB40012	S4B1229-CCV1	Chloroform	ug/L	7.94	10.0	79.4	80 120	V748541.D
SB40012	S4B1229-CCV1	Tetrachloroethylene	ug/L	5.91	10.0	59.1	70 130	V748541.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SB40012	S4B1229	BB40609-BS1	LCS		V748542.D
SB40012	S4B1229	BB40609-BSD1	LCS Dup		V748543.D
SB40012	S4B1229	BB40609-BLK1	Blank		V748545.D
SB40012	S4B1229	24B0405-27	Trip Blank		V748553.D

York Analytical Work Order Narrative

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BB40609	S4B1229	MSVOA7	BB40609-BLK1	V748545.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SB40012	4B1229	BB40609-BS1	LCS	V748542.D
SB40012	4B1229	BB40609-BSD1	LCS Dup	V748543.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4B1229	LCS	BB40609-BS1	2-Butanone		61		70 - 130	
S4B1229	LCS	BB40609-BS1	2-Hexanone		67.9		70 - 130	
S4B1229	LCS	BB40609-BS1	Acetone		44.9		70 - 130	
S4B1229	LCS	BB40609-BS1	Tetrachloroethylene		55.1		70 - 130	
S4B1229	LCS Dup	BB40609-BSD1	2-Butanone	61.0	69	12.3	70 - 130	30
S4B1229	LCS Dup	BB40609-BSD1	Acetone	44.9	49.8	10.3	70 - 130	30
S4B1229	LCS Dup	BB40609-BSD1	Tetrachloroethylene	55.1	52.7	4.45	70 - 130	30

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BB40609	24B0405-27	Trip Blank	
BB40609	BB40609-BLK1	Blank	

EPA 8260C

Dilutions: No sample dilutions were required.

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SL30027

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SL30027	S3L1333	S3L1333	Secondary Cal Check	S3L1333-SCV1	VOA#11	V11C013735.D
SL30027	S4B1530	S4B1530	Calibration Check	S4B1530-CCV1	VOA#11	V11C015159.D
SL30027	BB40900	S4B1530	LCS	BB40900-BS1	VOA#11	V11C015160.D
SL30027	BB40900	S4B1530	LCS Dup	BB40900-BSD1	VOA#11	V11C015161.D
SL30027	BB40900	S4B1530	Blank	BB40900-BLK1	VOA#11	V11C015162.D
SL30027	BB40900	S4B1530	VHB-SB-04 (3-3.5)	24B0405-09	VOA#11	V11C015164.D
SL30027	S4B1532	S4B1532	Calibration Check	S4B1532-CCV1	VOA#11	V11C015134.D
SL30027	BB40785	S4B1532	LCS	BB40785-BS1	VOA#11	V11C015135.D
SL30027	BB40785	S4B1532	LCS Dup	BB40785-BSD1	VOA#11	V11C015136.D
SL30027	BB40785	S4B1532	Blank	BB40785-BLK1	VOA#11	V11C015137.D
SL30027	BB40785	S4B1532	VHB-SB-05 (1-2)	24B0405-11	VOA#11	V11C015155.D

Initial calibration for EPA 8260C met method guidelines.

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SL30027	S3L1333-SCV1	Acetone	50.0	31.1	62.2	80 - 120
SL30027	S3L1333-SCV1	Dichlorodifluoromethane	50.0	31.0	62.0	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1532-CCV1	Calibration Check	V11C015134.D
BB40785-BS1	LCS	V11C015135.D
BB40785-BSD1	LCS Dup	V11C015136.D
BB40785-BLK1	Blank	V11C015137.D
24B0405-11	VHB-SB-05 (1-2)	V11C015155.D
S4B1530-CCV1	Calibration Check	V11C015159.D
BB40900-BS1	LCS	V11C015160.D
BB40900-BSD1	LCS Dup	V11C015161.D
BB40900-BLK1	Blank	V11C015162.D
24B0405-09	VHB-SB-04 (3-3.5)	V11C015164.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SL30027	S4B1530	S4B1530-CCV1	V11C015159.D	02/15/24 09:44
SL30027	S4B1532	S4B1532-CCV1	V11C015134.D	02/14/24 10:40

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SL30027	S4B1530-CCV1	Bromomethane	ug/L	68.5	50.0	137	70 130	V11C015159.D
SL30027	S4B1530-CCV1	Chloroform	ug/L	60.8	50.0	122	80 120	V11C015159.D
SL30027	S4B1530-CCV1	Trichlorofluoromethane	ug/L	66.8	50.0	134	70 130	V11C015159.D
SL30027	S4B1530-CCV1	Vinyl Chloride	ug/L	60.9	50.0	122	80 120	V11C015159.D
SL30027	S4B1532-CCV1	1,2-Dibromo-3-chloropropane	ug/L	34.4	50.0	68.8	70 130	V11C015134.D
SL30027	S4B1532-CCV1	2-Hexanone	ug/L	35.0	50.0	69.9	70 130	V11C015134.D
SL30027	S4B1532-CCV1	Dichlorodifluoromethane	ug/L	32.1	50.0	64.3	70 130	V11C015134.D
SL30027	S4B1532-CCV1	Naphthalene	ug/L	33.6	50.0	67.2	70 130	V11C015134.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SL30027	S4B1532	BB40785-BS1	LCS		V11C015135.D
SL30027	S4B1532	BB40785-BSD1	LCS Dup		V11C015136.D
SL30027	S4B1532	BB40785-BLK1	Blank		V11C015137.D
SL30027	S4B1532	24B0405-11	VHB-SB-05 (1-2)		V11C015155.D
SL30027	S4B1530	BB40900-BS1	LCS		V11C015160.D
SL30027	S4B1530	BB40900-BSD1	LCS Dup		V11C015161.D

York Analytical Work Order Narrative

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BB40785	S4B1532	VOA#11	BB40785-BLK1	V11C015137.D
VOA	BB40900	S4B1530	VOA#11	BB40900-BLK1	V11C015162.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SL30027	4B1532	BB40785-BS1	LCS	V11C015135.D
SL30027	4B1532	BB40785-BSD1	LCS Dup	V11C015136.D
SL30027	4B1530	BB40900-BS1	LCS	V11C015160.D
SL30027	4B1530	BB40900-BSD1	LCS Dup	V11C015161.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4B1530	LCS	BB40900-BS1	Bromomethane		134		70 - 130	
S4B1530	LCS	BB40900-BS1	Chloroethane		132		70 - 130	
S4B1530	LCS	BB40900-BS1	Dichlorodifluoromethane		159		70 - 130	
S4B1530	LCS	BB40900-BS1	Trichlorofluoromethane		139		70 - 130	
S4B1530	LCS Dup	BB40900-BSD1	Bromomethane	134	132	1.68	70 - 130	30
S4B1530	LCS Dup	BB40900-BSD1	Dichlorodifluoromethane	159	156	1.7	70 - 130	30
S4B1530	LCS Dup	BB40900-BSD1	Trichlorofluoromethane	139	136	2.13	70 - 130	30

EPA 8260C

Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
EPA 8260C	BB40848	VHB-SB-08 (7-8)	24B0405-21	100
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23	100
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE1	1000
EPA 8260C	BB40848	VHB-SB-09 (5-7)	24B0405-23RE2	2000

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D

SVOA, 8270 ASE RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SB40003**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SB40003	S4B0132	S4B0132	Secondary Cal Check	S4B0132-SCV1	MSBNA9	E90030531.D
SB40003	S4B1220	S4B1220	Calibration Check	S4B1220-CCV1	MSBNA9	E90030676.D
SB40003	BB40573	S4B1220	Blank	BB40573-BLK1	MSBNA9	E90030682.D
SB40003	BB40573	S4B1220	LCS	BB40573-BS1	MSBNA9	E90030683.D
SB40003	S4B1428	S4B1428	Calibration Check	S4B1428-CCV1	MSBNA9	E90030686.D
SB40003	BB40573	S4B1428	DUPMS1	BB40573-MS1	MSBNA9	E90030689.D
SB40003	BB40573	S4B1428	DUPMSD1	BB40573-MSD1	MSBNA9	E90030690.D
SB40003	BB40573	S4B1428	VHB-SB-01 (2.7-3.6)	24B0405-02	MSBNA9	E90030693.D
SB40003	BB40573	S4B1428	VHB-SB-02 (5-7)	24B0405-04	MSBNA9	E90030694.D
SB40003	BB40573	S4B1428	VHB-SB-03 (5.5-6.7)	24B0405-07	MSBNA9	E90030695.D
SB40003	BB40573	S4B1428	VHB-SB-04 (3-3.5)	24B0405-09	MSBNA9	E90030696.D
SB40003	BB40573	S4B1428	VHB-SB-05 (1-2)	24B0405-11	MSBNA9	E90030697.D
SB40003	BB40573	S4B1428	VHB-SB-06 (0.3-2.1)	24B0405-14	MSBNA9	E90030698.D
SB40003	BB40573	S4B1428	VHB-SB-07 (5-6)	24B0405-18	MSBNA9	E90030699.D
SB40003	BB40573	S4B1428	DUP	24B0405-26	MSBNA9	E90030700.D

Initial calibration for EPA 8270D exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SB40003	MSBNA9	1/31/2024 12:54:03 AM	E90030522.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
2,4-Dinitrophenol	38.41	15						Avg
4,6-Dinitro-2-methylphenol	32.70	15						Avg
4-Nitrophenol	17.85	15						Avg
Hexachlorocyclopentadiene	17.82	15						Avg
Pyridine	15.65	15						Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4B0132-SCV1		E90030531.D
Calibration Check	S4B1220-CCV1		E90030676.D

York Analytical Work Order Narrative

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SB40003	S4B0132-SCV1	2,4-Dimethylphenol	30.0	21.6	72.1	80 - 120
SB40003	S4B0132-SCV1	2,4-Dinitrophenol	30.0	42.9	143	80 - 120
SB40003	S4B0132-SCV1	4,6-Dinitro-2-methylphenol	30.0	40.4	135	80 - 120
SB40003	S4B0132-SCV1	Hexachlorocyclopentadiene	30.0	18.4	61.3	80 - 120
SB40003	S4B0132-SCV1	Pentachlorophenol	30.0	37.7	126	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1220-CCV1	Calibration Check	E90030676.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SB40003	S4B1220	S4B1220-CCV1	E90030676.D	02/12/24 09:17
SB40003	S4B1428	S4B1428-CCV1	E90030686.D	02/12/24 14:23

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SB40003	S4B1220-CCV1	2,4-Dinitrophenol	ug/mL	43.6	30.0	145	70 130	E90030676.D
SB40003	S4B1220-CCV1	4,6-Dinitro-2-methylphenol	ug/mL	40.4	30.0	135	70 130	E90030676.D

The following QC and or client samples were affected:

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Batch	Sequence	Instrument	Blank	FileID
SVOA	BB40573	MSBNA9	BB40573-BLK1	E90030682.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SB40003	4B1220	BB40573-BS1	LCS	E90030683.D

York Analytical Work Order Narrative

EPA 8270D

Matrix Spike, Matrix Spike Duplicate and/or Sample Duplicate-

MS/MSD/Duplicate analysis was performed on sample;

AnaClass	Cal	Batch	Sequence	SampleName	Sample	SourceSample	LabNumber
SVOA	SB40003	BB40573	S4B1428	DUPMS1	24B0405-26	DUP	BB40573-MS1
SVOA	SB40003	BB40573	S4B1428	DUPMSD1	24B0405-26	DUP	BB40573-MSD1

Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
EPA 8270D	BB40573	VHB-SB-01 (2.7-3.6)	24B0405-02	2
EPA 8270D	BB40573	VHB-SB-02 (5-7)	24B0405-04	2
EPA 8270D	BB40573	VHB-SB-03 (5.5-6.7)	24B0405-07	2
EPA 8270D	BB40573	VHB-SB-04 (3-3.5)	24B0405-09	2
EPA 8270D	BB40573	VHB-SB-05 (1-2)	24B0405-11	2
EPA 8270D	BB40573	VHB-SB-06 (0.3-2.1)	24B0405-14	2
EPA 8270D	BB40573	VHB-SB-07 (5-6)	24B0405-18	2
EPA 8270D	BB40573	DUP	24B0405-26	2

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8082A

Polychlorinated Biphenyls- Soxhlet Extraction

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : none

Samples and QC analyzed using this calibration / sequence.

Initial calibration for **EPA 8082A** **met method guidelines.**

EPA 8082A

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8082A

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

EPA 8082A

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

EPA 8082A

Dilutions: No sample dilutions were required.

EPA 8082A

Internal Standards / Surrogates

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8082A

PCB, 8082 ASE RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40019

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40019	S4A1142	S4A1142	Secondary Cal Check	S4A1142-SCV1	ECD#1	P1136401.D
SA40019	S4B0942	S4B0942	Calibration Check	S4B0942-CCV1	ECD#1	P1138590.D
SA40019	S4B0942	S4B0942	Aroclor Reference	S4B0942-ARC1	ECD#1	P1138591.D
SA40019	S4B0942	S4B0942	Calibration Check	S4B0942-CCV2	ECD#1	P1138599.D
SA40019	S4B0942	S4B0942	Calibration Check	S4B0942-CCV3	ECD#1	P1138620.D
SA40019	S4B0942	S4B0942	Calibration Check	S4B0942-CCV4	ECD#1	P1138642.D
SA40019	BB40566	S4B0942	Blank	BB40566-BLK2	ECD#1	P1138646.D
SA40019	BB40566	S4B0942	LCS	BB40566-BS2	ECD#1	P1138647.D
SA40019	BB40566	S4B0942	VHB-SB-09 (5-7)	24B0405-23	ECD#1	P1138648.D
SA40019	BB40566	S4B0942	VHB-SB-09 (5-7)MS2	BB40566-MS2	ECD#1	P1138659.D
SA40019	BB40566	S4B0942	VHB-SB-09 (5-7)MSD2	BB40566-MSD2	ECD#1	P1138660.D
SA40019	S4B0942	S4B0942	Calibration Check	S4B0942-CCV5	ECD#1	P1138661.D

Initial calibration for EPA 8082A exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40019	ECD#1	1/11/2024 4:24:09 PM	P1136394.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
Aroclor 1221	0.00	20	0.0000	0.05				Avg
Aroclor 1232	0.00	20	0.0000	0.05				Avg
Aroclor 1242	0.00	20	0.0000	0.05				Avg
Aroclor 1248	0.00	20	0.0000	0.05				Avg
Aroclor 1254	0.00	20	0.0000	0.05				Avg
Aroclor 1262	0.00	20	0.0000	0.05				Avg
Aroclor 1268	0.00	20	0.0000	0.05				Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Blank	BB40566-BLK2		P1138646.D
VHB-SB-09 (5-7)	24B0405-23		P1138648.D

York Analytical Work Order Narrative

EPA 8082A

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8082A

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40019	S4B0942	S4B0942-CCV1	P1138590.D	02/09/24 09:15
SA40019	S4B0942	S4B0942-CCV2	P1138599.D	02/09/24 17:18
SA40019	S4B0942	S4B0942-CCV3	P1138620.D	02/09/24 22:47
SA40019	S4B0942	S4B0942-CCV4	P1138642.D	02/10/24 03:48
SA40019	S4B0942	S4B0942-CCV5	P1138661.D	02/10/24 08:09

The continuing calibration verification recovered within method limits.

EPA 8082A

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
ARO	BB40566	S4B0942	ECD#1	BB40566-BLK2	P1138646.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40019	4B0942	BB40566-BS2	LCS	P1138647.D

EPA 8082A

Matrix Spike, Matrix Spike Duplicate and/or Sample Duplicate-

MS/MSD/Duplicate analysis was performed on sample;

AnaClass	Cal	Batch	Sequence	SampleName	Sample	SourceSample	LabNumber
ARO	SA40019	BB40566	S4B0942	VHB-SB-09 (5-7)MS2	24B0405-23	VHB-SB-09 (5-7)	BB40566-MS2
ARO	SA40019	BB40566	S4B0942	VHB-SB-09 (5-7)MSD2	24B0405-23	VHB-SB-09 (5-7)	BB40566-MSD2

Dilutions: No sample dilutions were required.

EPA 8082A

Internal Standards / Surrogates

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SA40019	Aroclor Reference	S4B0942-ARC1	Tetrachloro-m-xylene	101	-
SA40019	Aroclor Reference	S4B0942-ARC1	Decachlorobiphenyl	99	-

York Analytical Work Order Narrative

4.0 Analysis Issues

CT DEP ETPH

Extractable Total Petroleum Hydrocarbons (ETPH)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40030

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40030	S4A1907	S4A1907	Secondary Cal Check	S4A1907-SCV1	HP FID 3	G8009735.D
SA40030	S4B1509	S4B1509	Calibration Check	S4B1509-CCV1	HP FID 3	G8009969.D
SA40030	BB40820	S4B1509	Blank	BB40820-BLK1	HP FID 3	G8009976.D
SA40030	BB40820	S4B1509	LCS	BB40820-BS1	HP FID 3	G8009977.D
SA40030	S4B1509	S4B1509	Calibration Check	S4B1509-CCV2	HP FID 3	G8009981.D
SA40030	BB40820	S4B1509	VHB-SB-03 (5.5-6.7)	24B0405-07	HP FID 3	G8009984.D
SA40030	S4B1509	S4B1509	Calibration Check	S4B1509-CCV3	HP FID 3	G8009992.D
SA40030	S4B1509	S4B1509	Calibration Check	S4B1509-CCV4	HP FID 3	G8010004.D
SA40030	S4B1551	S4B1551	Calibration Check	S4B1551-CCV1	HP FID 3	G8010006.D
SA40030	BB40820	S4B1551	VHB-SB-09 (5-7)	24B0405-23	HP FID 3	G8010007.D
SA40030	BB40908	S4B1551	LCS	BB40908-BS1	HP FID 3	G8010014.D
SA40030	BB40908	S4B1551	VHB-SB-02 (5-7)	24B0405-04	HP FID 3	G8010015.D
SA40030	BB40908	S4B1551	Blank	BB40908-BLK1	HP FID 3	G8010018.D
SA40030	S4B1551	S4B1551	Calibration Check	S4B1551-CCV2	HP FID 3	G8010019.D
SA40030	S4B1551	S4B1551	Calibration Check	S4B1551-CCV3	HP FID 3	G8010031.D
SA40030	S4B1551	S4B1551	Calibration Check	S4B1551-CCV4	HP FID 3	G8010038.D

York Analytical Work Order Narrative

4.0 Analysis Issues

Initial calibration for CT DEP ETPH exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40030	HP FID 3	1/18/2024 7:03:11 AM	G8009725.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
ETPH (Extractable Total Petroleum Hydrocarbons)		15			0.93872	out		LRO

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4A1907-SCV1		G8009735.D
Calibration Check	S4B1509-CCV1		G8009969.D
Blank	BB40820-BLK1		G8009976.D
LCS	BB40820-BS1		G8009977.D
Calibration Check	S4B1509-CCV2		G8009981.D
VHB-SB-03 (5.5-6.7)	24B0405-07		G8009984.D
Calibration Check	S4B1509-CCV3		G8009992.D
Calibration Check	S4B1509-CCV4		G8010004.D
Calibration Check	S4B1551-CCV1		G8010006.D
VHB-SB-09 (5-7)	24B0405-23		G8010007.D
LCS	BB40908-BS1		G8010014.D
VHB-SB-02 (5-7)	24B0405-04		G8010015.D
Blank	BB40908-BLK1		G8010018.D
Calibration Check	S4B1551-CCV2		G8010019.D
Calibration Check	S4B1551-CCV3		G8010031.D
Calibration Check	S4B1551-CCV4		G8010038.D

CT DEP ETPH

Initial Calibration Verification-

The initial calibration verification for analytical method CT DEP ETPH
All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40030	S4B1509	S4B1509-CCV1	G8009969.D	02/14/24 08:52
SA40030	S4B1509	S4B1509-CCV2	G8009981.D	02/14/24 16:29
SA40030	S4B1509	S4B1509-CCV3	G8009992.D	02/14/24 23:30
SA40030	S4B1509	S4B1509-CCV4	G8010004.D	02/15/24 07:10
SA40030	S4B1551	S4B1551-CCV1	G8010006.D	02/15/24 09:12
SA40030	S4B1551	S4B1551-CCV2	G8010019.D	02/15/24 16:11
SA40030	S4B1551	S4B1551-CCV3	G8010031.D	02/15/24 23:52
SA40030	S4B1551	S4B1551-CCV4	G8010038.D	02/16/24 04:20

The continuing calibration verification recovered within method limits.

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CT DEP ETPH

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
GC	BB40820	S4B1509	HP FID 3	BB40820-BLK1	G8009976.D
GC	BB40908	S4B1551	HP FID 3	BB40908-BLK1	G8010018.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40030	4B1509	BB40820-BS1	LCS	G8009977.D
SA40030	4B1551	BB40908-BS1	LCS	G8010014.D

CT DEP ETPH

Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
CT DEP ETPH	BB40820	VHB-SB-09 (5-7)	24B0405-23	10

CT DEP ETPH

Internal Standards / Surrogates

Surrogate Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 6010D

Metals, CTDEP RCP

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : Metals, CTDEP RCP

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
Metals, CTDEP RCP	S4B1321	S4B1321	Initial Cal Check	S4B1321-ICV1	WinLabICP	QBI021224A-016
Metals, CTDEP RCP	S4B1321	S4B1321	Initial Cal Blank	S4B1321-ICB1	WinLabICP	QBI021224A-017
Metals, CTDEP RCP	S4B1321	S4B1321	Instrument RL Check	S4B1321-CRL1	WinLabICP	QBI021224A-020
Metals, CTDEP RCP	S4B1321	S4B1321	Instrument RL Check	S4B1321-CRL2	WinLabICP	QBI021224A-021
Metals, CTDEP RCP	S4B1321	S4B1321	Interference Check A	S4B1321-IFA1	WinLabICP	QBI021224A-022
Metals, CTDEP RCP	S4B1321	S4B1321	Interference Check B	S4B1321-IFB1	WinLabICP	QBI021224A-023
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Check	S4B1321-CCV1	WinLabICP	QBI021224A-024
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Blank	S4B1321-CCB1	WinLabICP	QBI021224A-027
Metals, CTDEP RCP	BB40607	S4B1321	Blank	BB40607-BLK1	WinLabICP	QBI021224A-194
Metals, CTDEP RCP	BB40607	S4B1321	Reference	BB40607-SRM1	WinLabICP	QBI021224A-195
Metals, CTDEP RCP	BB40607	S4B1321	VHB-SB-05 (1-2)	24B0405-11	WinLabICP	QBI021224A-196
Metals, CTDEP RCP	BB40607	S4B1321	VHB-SB-05 (5-6.4)	24B0405-12	WinLabICP	QBI021224A-197
Metals, CTDEP RCP	BB40607	S4B1321	VHB-SB-06 (0.3-2.1)	24B0405-14	WinLabICP	QBI021224A-198
Metals, CTDEP RCP	BB40607	S4B1321	VHB-SB-06 (5-7)	24B0405-15	WinLabICP	QBI021224A-199
Metals, CTDEP RCP	BB40607	S4B1321	VHB-SB-09 (5-7)	24B0405-23	WinLabICP	QBI021224A-200
Metals, CTDEP RCP	BB40607	S4B1321	DUP	24B0405-26	WinLabICP	QBI021224A-203
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Check	S4B1321-CCVE	WinLabICP	QBI021224RE_1-163
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Blank	S4B1321-CCBE	WinLabICP	QBI021224RE_1-164
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Check	S4B1321-CCVF	WinLabICP	QBI021224RE_1-175
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Blank	S4B1321-CCBF	WinLabICP	QBI021224RE_1-176
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Check	S4B1321-CCVG	WinLabICP	QBI021224RE_1-187
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Blank	S4B1321-CCBG	WinLabICP	QBI021224RE_1-188
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Check	S4B1321-CCVH	WinLabICP	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321	S4B1321	Calibration Blank	S4B1321-CCBH	WinLabICP	QBI021224RE_1-198
Metals, CTDEP RCP	S4B1418	S4B1418	Initial Cal Check	S4B1418-ICV1	WinLabICP	QBI021424ARE_1-001
Metals, CTDEP RCP	S4B1418	S4B1418	Initial Cal Blank	S4B1418-ICB1	WinLabICP	QBI021424ARE_1-002
Metals, CTDEP RCP	S4B1418	S4B1418	Instrument RL Check	S4B1418-CRL1	WinLabICP	QBI021424ARE_1-003
Metals, CTDEP RCP	S4B1418	S4B1418	Instrument RL Check	S4B1418-CRL2	WinLabICP	QBI021424ARE_1-004
Metals, CTDEP RCP	S4B1418	S4B1418	Interference Check A	S4B1418-IFA1	WinLabICP	QBI021424ARE_1-005
Metals, CTDEP RCP	S4B1418	S4B1418	Interference Check B	S4B1418-IFB1	WinLabICP	QBI021424ARE_1-006
Metals, CTDEP RCP	S4B1418	S4B1418	Calibration Check	S4B1418-CCV1	WinLabICP	QBI021424ARE_1-007
Metals, CTDEP RCP	S4B1418	S4B1418	Calibration Blank	S4B1418-CCB1	WinLabICP	QBI021424ARE_1-008
Metals, CTDEP RCP	S4B1418	S4B1418	Calibration Check	S4B1418-CCV2	WinLabICP	QBI021424ARE_1-019
Metals, CTDEP RCP	S4B1418	S4B1418	Calibration Blank	S4B1418-CCB2	WinLabICP	QBI021424ARE_1-020
Metals, CTDEP RCP	S4B1512	S4B1512	Initial Cal Check	S4B1512-ICV1	WinLabICP	QBI021424ARE_1-001
Metals, CTDEP RCP	S4B1512	S4B1512	Initial Cal Blank	S4B1512-ICB1	WinLabICP	QBI021424ARE_1-002
Metals, CTDEP RCP	S4B1512	S4B1512	Instrument RL Check	S4B1512-CRL1	WinLabICP	QBI021424ARE_1-003
Metals, CTDEP RCP	S4B1512	S4B1512	Instrument RL Check	S4B1512-CRL2	WinLabICP	QBI021424ARE_1-004

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4.0 Analysis Issues

Metals, CTDEP RCP	S4B1512	S4B1512	Interference Check A	S4B1512-IFA1	WinLabICP	QBI021424ARE_1-005
Metals, CTDEP RCP	S4B1512	S4B1512	Interference Check B	S4B1512-IFB1	WinLabICP	QBI021424ARE_1-006
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Check	S4B1512-CCV1	WinLabICP	QBI021424ARE_1-007
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Blank	S4B1512-CCB1	WinLabICP	QBI021424ARE_1-008
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Check	S4B1512-CCV8	WinLabICP	QBI021424ARE_1-091
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Blank	S4B1512-CCB8	WinLabICP	QBI021424ARE_1-092
Metals, CTDEP RCP	BB40611	S4B1512	Blank	BB40611-BLK1	WinLabICP	QBI021424ARE_1-096
Metals, CTDEP RCP	BB40611	S4B1512	Reference	BB40611-SRM1	WinLabICP	QBI021424ARE_1-097
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Check	S4B1512-CCV9	WinLabICP	QBI021424ARE_1-103
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Blank	S4B1512-CCB9	WinLabICP	QBI021424ARE_1-104
Metals, CTDEP RCP	BB40611	S4B1512	VHB-SB-01 (2.7-3.6)	24B0405-02	WinLabICP	QBI021424ARE_1-114
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Check	S4B1512-CCVA	WinLabICP	QBI021424ARE_1-115
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Blank	S4B1512-CCBA	WinLabICP	QBI021424ARE_1-116
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Check	S4B1512-CCVB	WinLabICP	QBI021424ARE_1-127
Metals, CTDEP RCP	S4B1512	S4B1512	Calibration Blank	S4B1512-CCBB	WinLabICP	QBI021424ARE_1-128

Initial calibration for EPA 6010D met method guidelines.

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EPA 6010D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 6010D

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
Metals, CTDEP RCP	S4B1418-ICV1	Antimony	0.250	0.284	114	90 - 110
Metals, CTDEP RCP	S4B1512-ICV1	Antimony	0.250	0.284	114	90 - 110
Metals, CTDEP RCP	S4B1321-ICV1	Selenium	0.250	0.290	116	90 - 110
Metals, CTDEP RCP	S4B1418-ICV1	Selenium	0.250	0.282	113	90 - 110
Metals, CTDEP RCP	S4B1512-ICV1	Selenium	0.250	0.282	113	90 - 110
Metals, CTDEP RCP	S4B1321-ICV1	Thallium	0.250	0.279	112	90 - 110

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4B1321-ICB1	Initial Cal Blank	QBI021224A-017
S4B1321-IFA1	Interference Check A	QBI021224A-022
S4B1321-IFB1	Interference Check B	QBI021224A-023
S4B1321-CCV1	Calibration Check	QBI021224A-024
S4B1321-CCB1	Calibration Blank	QBI021224A-027
BB40607-SRM1	Reference	QBI021224A-195
S4B1321-CCVE	Calibration Check	QBI021224RE_1-163
S4B1321-CCBE	Calibration Blank	QBI021224RE_1-164
S4B1321-CCVF	Calibration Check	QBI021224RE_1-175
S4B1321-CCBF	Calibration Blank	QBI021224RE_1-176
S4B1321-CCVG	Calibration Check	QBI021224RE_1-187
S4B1321-CCBG	Calibration Blank	QBI021224RE_1-188
S4B1321-CCVH	Calibration Check	QBI021224RE_1-197
S4B1321-CCBH	Calibration Blank	QBI021224RE_1-198
S4B1418-ICB1	Initial Cal Blank	QBI021424ARE_1-002
S4B1512-ICB1	Initial Cal Blank	QBI021424ARE_1-002
S4B1418-IFA1	Interference Check A	QBI021424ARE_1-005
S4B1512-IFA1	Interference Check A	QBI021424ARE_1-005
S4B1418-IFB1	Interference Check B	QBI021424ARE_1-006
S4B1512-IFB1	Interference Check B	QBI021424ARE_1-006
S4B1418-CCV1	Calibration Check	QBI021424ARE_1-007
S4B1512-CCV1	Calibration Check	QBI021424ARE_1-007
S4B1418-CCB1	Calibration Blank	QBI021424ARE_1-008
S4B1512-CCB1	Calibration Blank	QBI021424ARE_1-008
S4B1418-CCV2	Calibration Check	QBI021424ARE_1-019
S4B1418-CCB2	Calibration Blank	QBI021424ARE_1-020
S4B1512-CCV8	Calibration Check	QBI021424ARE_1-091
S4B1512-CCB8	Calibration Blank	QBI021424ARE_1-092
BB40611-SRM1	Reference	QBI021424ARE_1-097
S4B1512-CCV9	Calibration Check	QBI021424ARE_1-103

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S4B1512-CCB9	Calibration Blank	QBI021424ARE_1-104
S4B1512-CCVA	Calibration Check	QBI021424ARE_1-115
S4B1512-CCBA	Calibration Blank	QBI021424ARE_1-116
S4B1512-CCVB	Calibration Check	QBI021424ARE_1-127
S4B1512-CCBB	Calibration Blank	QBI021424ARE_1-128

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
Metals, CTDEP RCP	S4B1321	S4B1321-CCV1	QBI021224A-024	02/12/24 11:07
Metals, CTDEP RCP	S4B1321	S4B1321-CCVE	QBI021224RE_1-163	02/12/24 19:50
Metals, CTDEP RCP	S4B1321	S4B1321-CCVF	QBI021224RE_1-175	02/12/24 20:26
Metals, CTDEP RCP	S4B1321	S4B1321-CCVG	QBI021224RE_1-187	02/12/24 21:03
Metals, CTDEP RCP	S4B1321	S4B1321-CCVH	QBI021224RE_1-197	02/12/24 21:31
Metals, CTDEP RCP	S4B1321	S4B1321-ICV1	QBI021224A-016	02/12/24 10:41
Metals, CTDEP RCP	S4B1418	S4B1418-CCV1	QBI021424ARE_1-007	02/14/24 11:31
Metals, CTDEP RCP	S4B1418	S4B1418-CCV2	QBI021424ARE_1-019	02/14/24 12:05
Metals, CTDEP RCP	S4B1418	S4B1418-ICV1	QBI021424ARE_1-001	02/14/24 11:07
Metals, CTDEP RCP	S4B1512	S4B1512-CCV1	QBI021424ARE_1-007	02/14/24 11:31
Metals, CTDEP RCP	S4B1512	S4B1512-CCV8	QBI021424ARE_1-091	02/14/24 15:50
Metals, CTDEP RCP	S4B1512	S4B1512-CCV9	QBI021424ARE_1-103	02/14/24 17:16
Metals, CTDEP RCP	S4B1512	S4B1512-CCVA	QBI021424ARE_1-115	02/14/24 17:52
Metals, CTDEP RCP	S4B1512	S4B1512-CCVB	QBI021424ARE_1-127	02/14/24 18:26
Metals, CTDEP RCP	S4B1512	S4B1512-ICV1	QBI021424ARE_1-001	02/14/24 11:07

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
Metals, CTDEP RCP	S4B1321-CCVF	Barium	ug/mL	11.1	10.0	111	90 110	QBI021224RE_1-175
Metals, CTDEP RCP	S4B1321-CCVF	Selenium	ug/mL	0.567	0.500	113	90 110	QBI021224RE_1-175
Metals, CTDEP RCP	S4B1321-CCVF	Thallium	ug/mL	0.429	0.500	85.9	90 110	QBI021224RE_1-175
Metals, CTDEP RCP	S4B1321-CCVF	Zinc	ug/mL	2.88	2.50	115	90 110	QBI021224RE_1-175
Metals, CTDEP RCP	S4B1321-CCVG	Barium	ug/mL	11.3	10.0	113	90 110	QBI021224RE_1-187
Metals, CTDEP RCP	S4B1321-CCVG	Cadmium	ug/mL	0.277	0.250	111	90 110	QBI021224RE_1-187
Metals, CTDEP RCP	S4B1321-CCVG	Thallium	ug/mL	0.299	0.500	59.8	90 110	QBI021224RE_1-187
Metals, CTDEP RCP	S4B1321-CCVG	Zinc	ug/mL	2.94	2.50	117	90 110	QBI021224RE_1-187
Metals, CTDEP RCP	S4B1321-CCVH	Barium	ug/mL	11.4	10.0	114	90 110	QBI021224RE_1-197

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Metals, CTDEP RCP	S4B1321-CCVH	Beryllium	ug/mL	0.278	0.250	111	90	110	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321-CCVH	Cadmium	ug/mL	0.277	0.250	111	90	110	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321-CCVH	Selenium	ug/mL	0.569	0.500	114	90	110	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321-CCVH	Thallium	ug/mL	0.285	0.500	57.1	90	110	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321-CCVH	Zinc	ug/mL	2.98	2.50	119	90	110	QBI021224RE_1-197
Metals, CTDEP RCP	S4B1321-ICV1	Selenium	ug/mL	0.290	0.250	116	90	110	QBI021224A-016
Metals, CTDEP RCP	S4B1321-ICV1	Thallium	ug/mL	0.279	0.250	112	90	110	QBI021224A-016
Metals, CTDEP RCP	S4B1418-ICV1	Antimony	ug/mL	0.284	0.250	114	90	110	QBI021424ARE_1-001
Metals, CTDEP RCP	S4B1418-ICV1	Selenium	ug/mL	0.282	0.250	113	90	110	QBI021424ARE_1-001
Metals, CTDEP RCP	S4B1512-CCV8	Selenium	ug/mL	0.554	0.500	111	90	110	QBI021424ARE_1-091
Metals, CTDEP RCP	S4B1512-CCV8	Thallium	ug/mL	0.561	0.500	112	90	110	QBI021424ARE_1-091
Metals, CTDEP RCP	S4B1512-CCV9	Thallium	ug/mL	0.565	0.500	113	90	110	QBI021424ARE_1-103
Metals, CTDEP RCP	S4B1512-CCVA	Selenium	ug/mL	0.561	0.500	112	90	110	QBI021424ARE_1-115
Metals, CTDEP RCP	S4B1512-CCVA	Thallium	ug/mL	0.607	0.500	121	90	110	QBI021424ARE_1-115
Metals, CTDEP RCP	S4B1512-CCVB	Thallium	ug/mL	0.607	0.500	121	90	110	QBI021424ARE_1-127
Metals, CTDEP RCP	S4B1512-ICV1	Antimony	ug/mL	0.284	0.250	114	90	110	QBI021424ARE_1-001
Metals, CTDEP RCP	S4B1512-ICV1	Selenium	ug/mL	0.282	0.250	113	90	110	QBI021424ARE_1-001

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
Metals, CTDEP RC	S4B1321	S4B1321-ICB1	Initial Cal Blank		QBI021224A-017

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Metals, CTDEP RC	S4B1321	S4B1321-IFA1	Interference Check A	QBI021224A-022
Metals, CTDEP RC	S4B1321	S4B1321-IFB1	Interference Check B	QBI021224A-023
Metals, CTDEP RC	S4B1321	S4B1321-CCB1	Calibration Blank	QBI021224A-027
Metals, CTDEP RC	S4B1321	BB40607-BLK1	Blank	QBI021224A-194
Metals, CTDEP RC	S4B1321	BB40607-SRM1	Reference	QBI021224A-195
Metals, CTDEP RC	S4B1321	24B0405-11	VHB-SB-05 (1-2)	QBI021224A-196
Metals, CTDEP RC	S4B1321	24B0405-12	VHB-SB-05 (5-6.4)	QBI021224A-197
Metals, CTDEP RC	S4B1321	24B0405-14	VHB-SB-06 (0.3-2.1)	QBI021224A-198
Metals, CTDEP RC	S4B1321	24B0405-15	VHB-SB-06 (5-7)	QBI021224A-199
Metals, CTDEP RC	S4B1321	24B0405-23	VHB-SB-09 (5-7)	QBI021224A-200
Metals, CTDEP RC	S4B1321	24B0405-26	DUP	QBI021224A-203
Metals, CTDEP RC	S4B1321	S4B1321-CCBE	Calibration Blank	QBI021224RE_1-164
Metals, CTDEP RC	S4B1321	S4B1321-CCBF	Calibration Blank	QBI021224RE_1-176
Metals, CTDEP RC	S4B1321	S4B1321-CCBG	Calibration Blank	QBI021224RE_1-188
Metals, CTDEP RC	S4B1321	S4B1321-CCBH	Calibration Blank	QBI021224RE_1-198
Metals, CTDEP RC	S4B1418	S4B1418-ICB1	Initial Cal Blank	QBI021424ARE_1-002
Metals, CTDEP RC	S4B1512	S4B1512-ICB1	Initial Cal Blank	QBI021424ARE_1-002
Metals, CTDEP RC	S4B1418	S4B1418-IFA1	Interference Check A	QBI021424ARE_1-005
Metals, CTDEP RC	S4B1512	S4B1512-IFA1	Interference Check A	QBI021424ARE_1-005
Metals, CTDEP RC	S4B1418	S4B1418-IFB1	Interference Check B	QBI021424ARE_1-006
Metals, CTDEP RC	S4B1512	S4B1512-IFB1	Interference Check B	QBI021424ARE_1-006
Metals, CTDEP RC	S4B1418	S4B1418-CCB1	Calibration Blank	QBI021424ARE_1-008
Metals, CTDEP RC	S4B1512	S4B1512-CCB1	Calibration Blank	QBI021424ARE_1-008
Metals, CTDEP RC	S4B1418	S4B1418-CCB2	Calibration Blank	QBI021424ARE_1-020
Metals, CTDEP RC	S4B1512	S4B1512-CCB8	Calibration Blank	QBI021424ARE_1-092
Metals, CTDEP RC	S4B1512	BB40611-SRM1	Reference	QBI021424ARE_1-097
Metals, CTDEP RC	S4B1512	S4B1512-CCB9	Calibration Blank	QBI021424ARE_1-104
Metals, CTDEP RC	S4B1512	S4B1512-CCBA	Calibration Blank	QBI021424ARE_1-116
Metals, CTDEP RC	S4B1512	S4B1512-CCBB	Calibration Blank	QBI021424ARE_1-128

York Analytical Work Order Narrative

EPA 6010D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
METALS	BB40607	S4B1321	WinLabICP	BB40607-BLK1	QBI021224A-194
METALS	BB40611	S4B1512	WinLabICP	BB40611-BLK1	QBI021424ARE_1-096

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
Metals, CTDEP RCP	4B1321	BB40607-SRM1	Reference	QBI021224A-195
Metals, CTDEP RCP	4B1512	BB40611-SRM1	Reference	QBI021424ARE_1-097

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4B1321	Reference	BB40607-SRM1	Nickel		108		72 - 104.2	
S4B1321	Reference	BB40607-SRM1	Selenium		70.6		70. - 108.8	
S4B1512	Reference	BB40611-SRM1	Selenium		69.1		70. - 108.8	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BB40611	24B0405-02	VHB-SB-01 (2.7-3.6)	
BB40607	24B0405-11	VHB-SB-05 (1-2)	
BB40607	24B0405-12	VHB-SB-05 (5-6.4)	
BB40607	24B0405-14	VHB-SB-06 (0.3-2.1)	
BB40607	24B0405-15	VHB-SB-06 (5-7)	
BB40607	24B0405-23	VHB-SB-09 (5-7)	
BB40607	24B0405-26	DUP	
BB40607	BB40607-BLK1	Blank	
BB40607	BB40607-SRM1	Reference	
BB40611	BB40611-BLK1	Blank	
BB40611	BB40611-SRM1	Reference	
S4B1321	S4B1321-ICB1	Initial Cal Blank	
S4B1321	S4B1321-IFA1	Interference Check A	
S4B1321	S4B1321-IFB1	Interference Check B	
S4B1512	S4B1512-ICB1	Initial Cal Blank	
S4B1512	S4B1512-IFA1	Interference Check A	
S4B1512	S4B1512-IFB1	Interference Check B	

EPA 6010D

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

EPA 6010D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 7473

Mercury by 7473

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **Mercury by 7473**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
Mercury by 7473	BB40868	S4B1460	VHB-SB-01 (2.7-3.6)	24B0405-02	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	VHB-SB-05 (1-2)	24B0405-11	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	VHB-SB-05 (5-6.4)	24B0405-12	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	VHB-SB-06 (0.3-2.1)	24B0405-14	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	VHB-SB-06 (5-7)	24B0405-15	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	VHB-SB-09 (5-7)	24B0405-23	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	DUP	24B0405-26	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	Blank	BB40868-BLK1	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	BB40868	S4B1460	Reference	BB40868-SRM1	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Blank	S4B1460-CCB1	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Blank	S4B1460-CCB2	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Blank	S4B1460-CCB3	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Check	S4B1460-CCV1	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Check	S4B1460-CCV2	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Calibration Check	S4B1460-CCV3	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	High Cal Check	S4B1460-HCV1	DMA 80-01	QBHg DMA 80-03 021424a
Mercury by 7473	S4B1460	S4B1460	Low Cal Check	S4B1460-LCV1	DMA 80-01	QBHg DMA 80-03 021424a

Initial calibration for EPA 7473 met method guidelines.

EPA 7473

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 7473

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
Mercury by 7473	S4B1460	S4B1460-CCV1	QBHg DMA 80-03 021424a	02/14/24 22:22
Mercury by 7473	S4B1460	S4B1460-CCV2	QBHg DMA 80-03 021424a	02/14/24 22:22
Mercury by 7473	S4B1460	S4B1460-CCV3	QBHg DMA 80-03 021424a	02/15/24 14:19

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 7473

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
HG	BB40868	S4B1460	DMA 80-01	BB40868-BLK1	QBHg DMA 80-03 021424a

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
Mercury by 7473	4B1460	BB40868-SRM1	Reference	QBHg DMA 80-03 021424a

EPA 7473

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

York Analytical Laboratories, Inc. **Formulae Used for Sample Calculations**

1. **Volatiles in Air-ppbv**

Cx (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_x = \frac{(A_x)(C_{is})(DF)}{(A_{is})(RRF)}$$

2. **Volatiles in Air-ug/m³**

Cx (ug/m³) = Compound concentration in ug/m³

$$C_x (\text{ug/m}^3) = \frac{(\text{ppbv} \times \text{Molecular wt.})}{(24.040)}$$

3. **Volatile Organics (water and soil), ug/L or ug/kg**

Soils/Waters

Medium Level Soils

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})}$$

$$C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

4. **Semi-Volatiles (waters and soils)**

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

5. **Pesticides/PCB (waters and soils), DRO, CTETPH**

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

Cx = concentration of analyte as ug/L or ug/kg

Ax = Area of the characteristic ion for the compound to be measured, counts.

Ais = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

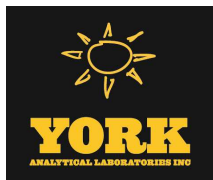
VA = volume of MeOH aliquot for medium level soils

VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



Analytical Batch Summary

Batch ID: [none] **Preparation Method:** SW846-%Solid **Prepared By:**

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-01	VHB-SB-01 (1.2-1.6)	02/06/24

Batch ID: 717582A **Preparation Method:** SW3540C **Prepared By:**

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-01	VHB-SB-01 (1.2-1.6)	02/08/24

Batch ID: BB40566 **Preparation Method:** EPA 3546 PCB-RCP **Prepared By:** me

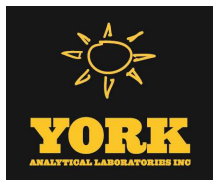
YORK Sample ID	Client Sample ID	Preparation Date
24B0405-23	VHB-SB-09 (5-7)	02/09/24
BB40566-BLK2	Blank	02/09/24
BB40566-BS2	LCS	02/09/24
BB40566-MS2	Matrix Spike	02/09/24
BB40566-MSD2	Matrix Spike Dup	02/09/24

Batch ID: BB40573 **Preparation Method:** EPA 3546- SVOA RCP **Prepared By:** kaz

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-02	VHB-SB-01 (2.7-3.6)	02/09/24
24B0405-04	VHB-SB-02 (5-7)	02/09/24
24B0405-07	VHB-SB-03 (5.5-6.7)	02/09/24
24B0405-09	VHB-SB-04 (3-3.5)	02/09/24
24B0405-11	VHB-SB-05 (1-2)	02/09/24
24B0405-14	VHB-SB-06 (0.3-2.1)	02/09/24
24B0405-18	VHB-SB-07 (5-6)	02/09/24
24B0405-26	DUP	02/09/24
BB40573-BLK1	Blank	02/09/24
BB40573-BS1	LCS	02/09/24
BB40573-MS1	Matrix Spike	02/09/24
BB40573-MSD1	Matrix Spike Dup	02/09/24

Batch ID: BB40607 **Preparation Method:** EPA 3050B **Prepared By:** JEF

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-11	VHB-SB-05 (1-2)	02/09/24
24B0405-12	VHB-SB-05 (5-6.4)	02/09/24
24B0405-14	VHB-SB-06 (0.3-2.1)	02/09/24
24B0405-15	VHB-SB-06 (5-7)	02/09/24
24B0405-23	VHB-SB-09 (5-7)	02/09/24
24B0405-26	DUP	02/09/24
BB40607-BLK1	Blank	02/09/24
BB40607-SRM1	Reference	02/09/24



Batch ID: BB40609

Preparation Method: EPA 5030B

Prepared By: SMA

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-27	Trip Blank	02/09/24
BB40609-BLK1	Blank	02/09/24
BB40609-BS1	LCS	02/09/24
BB40609-BSD1	LCS Dup	02/09/24

Batch ID: BB40611

Preparation Method: EPA 3050B

Prepared By: JEF

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-02	VHB-SB-01 (2.7-3.6)	02/09/24
BB40611-BLK1	Blank	02/09/24
BB40611-SRM1	Reference	02/09/24

Batch ID: BB40782

Preparation Method: EPA 5035A

Prepared By: SS

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-14	VHB-SB-06 (0.3-2.1)	02/14/24
24B0405-26	DUP	02/14/24
BB40782-BLK1	Blank	02/14/24
BB40782-BS1	LCS	02/14/24
BB40782-BSD1	LCS Dup	02/14/24

Batch ID: BB40785

Preparation Method: EPA 5035A

Prepared By: SS

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-11	VHB-SB-05 (1-2)	02/14/24
BB40785-BLK1	Blank	02/14/24
BB40785-BS1	LCS	02/14/24
BB40785-BSD1	LCS Dup	02/14/24

Batch ID: BB40820

Preparation Method: EPA 3546 ETPH

Prepared By: JLM

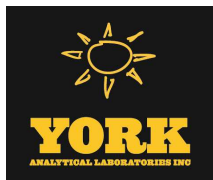
YORK Sample ID	Client Sample ID	Preparation Date
24B0405-07	VHB-SB-03 (5.5-6.7)	02/14/24
24B0405-23	VHB-SB-09 (5-7)	02/14/24
BB40820-BLK1	Blank	02/14/24
BB40820-BS1	LCS	02/14/24

Batch ID: BB40848

Preparation Method: EPA 5035A

Prepared By: SMA

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-21	VHB-SB-08 (7-8)	02/15/24
24B0405-23	VHB-SB-09 (5-7)	02/15/24
24B0405-23RE1	VHB-SB-09 (5-7)	02/15/24



24B0405-23RE2	VHB-SB-09 (5-7)	02/15/24
BB40848-BLK2	Blank	02/15/24
BB40848-BS2	LCS	02/15/24
BB40848-BSD2	LCS Dup	02/15/24

Batch ID: BB40868 **Preparation Method:** EPA 7473 soil **Prepared By:** AGNR

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-02	VHB-SB-01 (2.7-3.6)	02/14/24
24B0405-11	VHB-SB-05 (1-2)	02/14/24
24B0405-12	VHB-SB-05 (5-6.4)	02/14/24
24B0405-14	VHB-SB-06 (0.3-2.1)	02/14/24
24B0405-15	VHB-SB-06 (5-7)	02/14/24
24B0405-23	VHB-SB-09 (5-7)	02/14/24
24B0405-26	DUP	02/14/24
BB40868-BLK1	Blank	02/14/24
BB40868-SRM1	Reference	02/14/24

Batch ID: BB40898 **Preparation Method:** % Solids Prep **Prepared By:** sgs

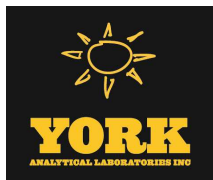
YORK Sample ID	Client Sample ID	Preparation Date
24B0405-02	VHB-SB-01 (2.7-3.6)	02/15/24
24B0405-04	VHB-SB-02 (5-7)	02/15/24
24B0405-07	VHB-SB-03 (5.5-6.7)	02/15/24
24B0405-09	VHB-SB-04 (3-3.5)	02/15/24
24B0405-11	VHB-SB-05 (1-2)	02/15/24
24B0405-12	VHB-SB-05 (5-6.4)	02/15/24
24B0405-14	VHB-SB-06 (0.3-2.1)	02/15/24
24B0405-15	VHB-SB-06 (5-7)	02/15/24
24B0405-18	VHB-SB-07 (5-6)	02/15/24
24B0405-21	VHB-SB-08 (7-8)	02/15/24
24B0405-23	VHB-SB-09 (5-7)	02/15/24
24B0405-26	DUP	02/15/24

Batch ID: BB40900 **Preparation Method:** EPA 5035A **Prepared By:** SMA

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-09	VHB-SB-04 (3-3.5)	02/15/24
BB40900-BLK1	Blank	02/15/24
BB40900-BS1	LCS	02/15/24
BB40900-BSD1	LCS Dup	02/15/24

Batch ID: BB40908 **Preparation Method:** EPA 3546 ETPH **Prepared By:** AN

YORK Sample ID	Client Sample ID	Preparation Date
24B0405-04	VHB-SB-02 (5-7)	02/15/24
BB40908-BLK1	Blank	02/15/24
BB40908-BS1	LCS	02/15/24



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

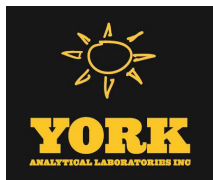
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40609 - EPA 5030B

Blank (BB40609-BLK1)

Prepared & Analyzed: 02/09/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	1.00	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Chlorotoluene	ND	0.500	"
4-Methyl-2-pentanone	ND	0.500	"
Acetone	ND	2.00	"
Acrylonitrile	ND	0.500	"
Benzene	ND	0.500	"
Bromobenzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"
Bromoform	ND	0.500	"
Bromomethane	ND	0.500	"
Carbon disulfide	ND	0.500	"
Carbon tetrachloride	ND	0.500	"
Chlorobenzene	ND	0.500	"
Chloroethane	ND	0.500	"
Chloroform	ND	0.500	"
Chloromethane	ND	0.500	"
cis-1,2-Dichloroethylene	ND	0.500	"
cis-1,3-Dichloropropylene	ND	0.500	"
Dibromochloromethane	ND	0.500	"
Dibromomethane	ND	0.500	"
Dichlorodifluoromethane	ND	0.500	"
Ethyl Benzene	ND	0.500	"
Hexachlorobutadiene	ND	0.500	"
Isopropylbenzene	ND	0.500	"
Methyl Methacrylate	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40609 - EPA 5030B

Blank (BB40609-BLK1)

Prepared & Analyzed: 02/09/2024

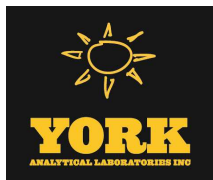
Methyl tert-butyl ether (MTBE)	ND	0.500	ug/L
Methylene chloride	ND	2.00	"
Naphthalene	ND	2.00	"
n-Butylbenzene	ND	0.500	"
n-Propylbenzene	ND	0.500	"
o-Xylene	ND	0.500	"
p- & m- Xylenes	ND	1.00	"
p-Isopropyltoluene	ND	0.500	"
sec-Butylbenzene	ND	0.500	"
Styrene	ND	0.500	"
tert-Butylbenzene	ND	0.500	"
Tetrachloroethylene	ND	0.500	"
Tetrahydrofuran	ND	4.00	"
Toluene	ND	0.500	"
trans-1,2-Dichloroethylene	ND	0.500	"
trans-1,3-Dichloropropylene	ND	0.500	"
trans-1,4-dichloro-2-butene	ND	0.500	"
Trichloroethylene	ND	0.500	"
Trichlorofluoromethane	ND	0.500	"
Vinyl Chloride	ND	0.500	"

Surrogate: SURR: 1,2-Dichloroethane-d4	10.2	"	10.0	102	70-130
Surrogate: SURR: Toluene-d8	11.2	"	10.0	112	70-130
Surrogate: SURR: p-Bromofluorobenzene	10.7	"	10.0	107	70-130

LCS (BB40609-BS1)

Prepared & Analyzed: 02/09/2024

1,1,1,2-Tetrachloroethane	10.2	ug/L	10.0	102	70-130
1,1,1-Trichloroethane	8.79	"	10.0	87.9	70-130
1,1,2,2-Tetrachloroethane	12.3	"	10.0	123	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.80	"	10.0	98.0	70-130
1,1,2-Trichloroethane	9.96	"	10.0	99.6	70-130
1,1-Dichloroethane	8.46	"	10.0	84.6	70-130
1,1-Dichloroethylene	9.43	"	10.0	94.3	70-130
1,1-Dichloropropylene	8.87	"	10.0	88.7	70-130
1,2,3-Trichlorobenzene	10.9	"	10.0	109	70-130
1,2,3-Trichloropropane	11.2	"	10.0	112	70-130
1,2,4-Trichlorobenzene	10.3	"	10.0	103	70-130
1,2,4-Trimethylbenzene	12.3	"	10.0	123	70-130
1,2-Dibromo-3-chloropropane	9.62	"	10.0	96.2	70-130
1,2-Dibromoethane	10.1	"	10.0	101	70-130
1,2-Dichlorobenzene	11.2	"	10.0	112	70-130
1,2-Dichloroethane	8.48	"	10.0	84.8	70-130
1,2-Dichloropropane	10.4	"	10.0	104	70-130
1,3,5-Trimethylbenzene	12.2	"	10.0	122	70-130
1,3-Dichlorobenzene	11.2	"	10.0	112	70-130
1,3-Dichloropropane	10.0	"	10.0	100	70-130
1,4-Dichlorobenzene	11.2	"	10.0	112	70-130
2,2-Dichloropropane	9.55	"	10.0	95.5	70-130
2-Butanone	6.10	"	10.0	61.0	70-130
2-Chlorotoluene	11.5	"	10.0	115	70-130
2-Hexanone	6.79	"	10.0	67.9	70-130
4-Chlorotoluene	11.6	"	10.0	116	70-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

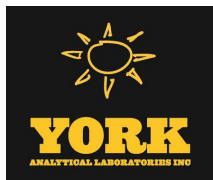
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40609 - EPA 5030B

LCS (BB40609-BS1)

Prepared & Analyzed: 02/09/2024

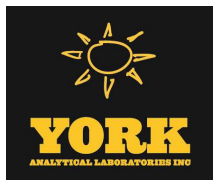
4-Methyl-2-pentanone	9.36		ug/L	10.0		93.6	70-130				
Acetone	4.49		"	10.0		44.9	70-130	Low Bias			
Acrylonitrile	8.32		"	10.0		83.2	70-130				
Benzene	8.86		"	10.0		88.6	70-130				
Bromobenzene	11.3		"	10.0		113	70-130				
Bromochloromethane	8.39		"	10.0		83.9	70-130				
Bromodichloromethane	10.2		"	10.0		102	70-130				
Bromoform	10.0		"	10.0		100	70-130				
Bromomethane	8.99		"	10.0		89.9	70-130				
Carbon disulfide	9.50		"	10.0		95.0	70-130				
Carbon tetrachloride	8.10		"	10.0		81.0	70-130				
Chlorobenzene	10.3		"	10.0		103	70-130				
Chloroethane	9.39		"	10.0		93.9	70-130				
Chloroform	8.60		"	10.0		86.0	70-130				
Chloromethane	9.29		"	10.0		92.9	70-130				
cis-1,2-Dichloroethylene	8.76		"	10.0		87.6	70-130				
cis-1,3-Dichloropropylene	9.95		"	10.0		99.5	70-130				
Dibromochloromethane	10.0		"	10.0		100	70-130				
Dibromomethane	10.0		"	10.0		100	70-130				
Dichlorodifluoromethane	12.2		"	10.0		122	70-130				
Ethyl Benzene	10.8		"	10.0		108	70-130				
Hexachlorobutadiene	12.0		"	10.0		120	70-130				
Isopropylbenzene	12.0		"	10.0		120	70-130				
Methyl Methacrylate	9.80		"	10.0		98.0	70-130				
Methyl tert-butyl ether (MTBE)	8.04		"	10.0		80.4	70-130				
Methylene chloride	8.37		"	10.0		83.7	70-130				
Naphthalene	9.70		"	10.0		97.0	70-130				
n-Butylbenzene	12.0		"	10.0		120	70-130				
n-Propylbenzene	11.9		"	10.0		119	70-130				
o-Xylene	10.5		"	10.0		105	70-130				
p- & m- Xylenes	21.2		"	20.0		106	70-130				
p-Isopropyltoluene	10.8		"	10.0		108	70-130				
sec-Butylbenzene	12.2		"	10.0		122	70-130				
Styrene	9.21		"	10.0		92.1	70-130				
tert-Butylbenzene	12.0		"	10.0		120	70-130				
Tetrachloroethylene	5.51		"	10.0		55.1	70-130	Low Bias			
Tetrahydrofuran	7.20		"	10.0		72.0	70-130				
Toluene	10.7		"	10.0		107	70-130				
trans-1,2-Dichloroethylene	8.89		"	10.0		88.9	70-130				
trans-1,3-Dichloropropylene	10.1		"	10.0		101	70-130				
trans-1,4-dichloro-2-butene	11.3		"	10.0		113	70-130				
Trichloroethylene	9.74		"	10.0		97.4	70-130				
Trichlorofluoromethane	9.79		"	10.0		97.9	70-130				
Vinyl Chloride	9.91		"	10.0		99.1	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.97		"	10.0		99.7	70-130				
Surrogate: SURR: Toluene-d8	11.2		"	10.0		112	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.5		"	10.0		105	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40609 - EPA 5030B											
LCS Dup (BB40609-BSD1)						Prepared & Analyzed: 02/09/2024					
1,1,1,2-Tetrachloroethane	10.2		ug/L	10.0		102	70-130		0.784	30	
1,1,1-Trichloroethane	8.45		"	10.0		84.5	70-130		3.94	30	
1,1,2,2-Tetrachloroethane	12.9		"	10.0		129	70-130		4.28	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.33		"	10.0		93.3	70-130		4.91	30	
1,1,2-Trichloroethane	10.4		"	10.0		104	70-130		4.03	30	
1,1-Dichloroethane	8.21		"	10.0		82.1	70-130		3.00	30	
1,1-Dichloroethylene	9.01		"	10.0		90.1	70-130		4.56	30	
1,1-Dichloropropylene	8.54		"	10.0		85.4	70-130		3.79	30	
1,2,3-Trichlorobenzene	11.2		"	10.0		112	70-130		2.44	30	
1,2,3-Trichloropropane	11.7		"	10.0		117	70-130		4.10	30	
1,2,4-Trichlorobenzene	10.3		"	10.0		103	70-130		0.00	30	
1,2,4-Trimethylbenzene	11.6		"	10.0		116	70-130		6.04	30	
1,2-Dibromo-3-chloropropane	10.4		"	10.0		104	70-130		7.98	30	
1,2-Dibromoethane	10.3		"	10.0		103	70-130		2.25	30	
1,2-Dichlorobenzene	11.1		"	10.0		111	70-130		0.449	30	
1,2-Dichloroethane	8.63		"	10.0		86.3	70-130		1.75	30	
1,2-Dichloropropane	10.2		"	10.0		102	70-130		1.74	30	
1,3,5-Trimethylbenzene	11.5		"	10.0		115	70-130		6.33	30	
1,3-Dichlorobenzene	10.9		"	10.0		109	70-130		2.89	30	
1,3-Dichloropropane	10.2		"	10.0		102	70-130		2.07	30	
1,4-Dichlorobenzene	10.9		"	10.0		109	70-130		3.34	30	
2,2-Dichloropropane	9.11		"	10.0		91.1	70-130		4.72	30	
2-Butanone	6.90		"	10.0		69.0	70-130	Low Bias	12.3	30	
2-Chlorotoluene	11.0		"	10.0		110	70-130		4.36	30	
2-Hexanone	7.63		"	10.0		76.3	70-130		11.7	30	
4-Chlorotoluene	11.1		"	10.0		111	70-130		4.93	30	
4-Methyl-2-pentanone	10.3		"	10.0		103	70-130		9.17	30	
Acetone	4.98		"	10.0		49.8	70-130	Low Bias	10.3	30	
Acrylonitrile	9.10		"	10.0		91.0	70-130		8.96	30	
Benzene	8.74		"	10.0		87.4	70-130		1.36	30	
Bromobenzene	11.2		"	10.0		112	70-130		0.887	30	
Bromochloromethane	8.47		"	10.0		84.7	70-130		0.949	30	
Bromodichloromethane	10.3		"	10.0		103	70-130		0.293	30	
Bromoform	10.5		"	10.0		105	70-130		4.59	30	
Bromomethane	8.11		"	10.0		81.1	70-130		10.3	30	
Carbon disulfide	9.10		"	10.0		91.0	70-130		4.30	30	
Carbon tetrachloride	7.72		"	10.0		77.2	70-130		4.80	30	
Chlorobenzene	10.1		"	10.0		101	70-130		1.67	30	
Chloroethane	8.97		"	10.0		89.7	70-130		4.58	30	
Chloroform	8.39		"	10.0		83.9	70-130		2.47	30	
Chloromethane	9.01		"	10.0		90.1	70-130		3.06	30	
cis-1,2-Dichloroethylene	8.58		"	10.0		85.8	70-130		2.08	30	
cis-1,3-Dichloropropylene	9.89		"	10.0		98.9	70-130		0.605	30	
Dibromochloromethane	10.4		"	10.0		104	70-130		2.94	30	
Dibromomethane	10.3		"	10.0		103	70-130		2.95	30	
Dichlorodifluoromethane	11.0		"	10.0		110	70-130		9.98	30	
Ethyl Benzene	10.4		"	10.0		104	70-130		2.93	30	
Hexachlorobutadiene	11.3		"	10.0		113	70-130		6.09	30	
Isopropylbenzene	11.4		"	10.0		114	70-130		5.65	30	
Methyl Methacrylate	10.7		"	10.0		107	70-130		8.59	30	
Methyl tert-butyl ether (MTBE)	8.56		"	10.0		85.6	70-130		6.27	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40609 - EPA 5030B

LCS Dup (BB40609-BSD1)

Prepared & Analyzed: 02/09/2024

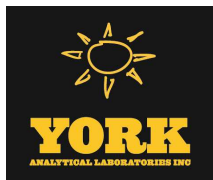
Methylene chloride	8.41		ug/L	10.0		84.1	70-130		0.477	30	
Naphthalene	10.2		"	10.0		102	70-130		5.12	30	
n-Butylbenzene	11.2		"	10.0		112	70-130		6.83	30	
n-Propylbenzene	11.1		"	10.0		111	70-130		6.79	30	
o-Xylene	10.3		"	10.0		103	70-130		1.93	30	
p- & m- Xylenes	20.5		"	20.0		102	70-130		3.36	30	
p-Isopropyltoluene	10.2		"	10.0		102	70-130		4.96	30	
sec-Butylbenzene	11.3		"	10.0		113	70-130		7.33	30	
Styrene	9.08		"	10.0		90.8	70-130		1.42	30	
tert-Butylbenzene	11.2		"	10.0		112	70-130		6.12	30	
Tetrachloroethylene	5.27		"	10.0		52.7	70-130	Low Bias	4.45	30	
Tetrahydrofuran	8.03		"	10.0		80.3	70-130		10.9	30	
Toluene	10.3		"	10.0		103	70-130		3.82	30	
trans-1,2-Dichloroethylene	8.51		"	10.0		85.1	70-130		4.37	30	
trans-1,3-Dichloropropylene	10.4		"	10.0		104	70-130		2.25	30	
trans-1,4-dichloro-2-butene	11.4		"	10.0		114	70-130		0.884	30	
Trichloroethylene	9.26		"	10.0		92.6	70-130		5.05	30	
Trichlorofluoromethane	9.25		"	10.0		92.5	70-130		5.67	30	
Vinyl Chloride	9.26		"	10.0		92.6	70-130		6.78	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	10.4		"	10.0		104	70-130				
Surrogate: SURR: Toluene-d8	11.1		"	10.0		111	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	70-130				

Batch BB40782 - EPA 5035A

Blank (BB40782-BLK1)

Prepared & Analyzed: 02/14/2024

1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet
1,1,1-Trichloroethane	ND	0.0050	"
1,1,2,2-Tetrachloroethane	ND	0.0050	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"
1,1,2-Trichloroethane	ND	0.0050	"
1,1-Dichloroethane	ND	0.0050	"
1,1-Dichloroethylene	ND	0.0050	"
1,1-Dichloropropylene	ND	0.0050	"
1,2,3-Trichlorobenzene	ND	0.0050	"
1,2,3-Trichloropropane	ND	0.0050	"
1,2,4-Trichlorobenzene	ND	0.0050	"
1,2,4-Trimethylbenzene	ND	0.0050	"
1,2-Dibromo-3-chloropropane	ND	0.0050	"
1,2-Dibromoethane	ND	0.0050	"
1,2-Dichlorobenzene	ND	0.0050	"
1,2-Dichloroethane	ND	0.0050	"
1,2-Dichloropropane	ND	0.0050	"
1,3,5-Trimethylbenzene	ND	0.0050	"
1,3-Dichlorobenzene	ND	0.0050	"
1,3-Dichloropropane	ND	0.0050	"
1,4-Dichlorobenzene	ND	0.0050	"
2,2-Dichloropropane	ND	0.0050	"
2-Butanone	ND	0.0050	"
2-Chlorotoluene	ND	0.0050	"
2-Hexanone	ND	0.0050	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

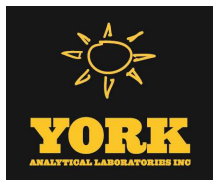
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40782 - EPA 5035A

Blank (BB40782-BLK1)

Prepared & Analyzed: 02/14/2024

4-Chlorotoluene	ND	0.0050	mg/kg wet								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromobenzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								
Dichlorodifluoromethane	ND	0.0050	"								
Ethyl Benzene	ND	0.0050	"								
Hexachlorobutadiene	ND	0.0050	"								
Isopropylbenzene	ND	0.0050	"								
Methyl Methacrylate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
Naphthalene	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								
n-Propylbenzene	ND	0.0050	"								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Tetrahydrofuran	ND	0.010	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
trans-1,4-dichloro-2-butene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	47.9		ug/L	50.0		95.7	70-130				
Surrogate: SURR: Toluene-d8	48.5		"	50.0		96.9	70-130				
Surrogate: SURR: p-Bromofluorobenzene	57.8		"	50.0		116	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

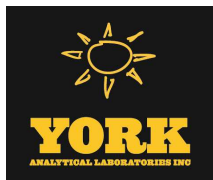
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40782 - EPA 5035A

LCS (BB40782-BS1)

Prepared & Analyzed: 02/14/2024

1,1,1,2-Tetrachloroethane	51.0		ug/L	50.0		102	70-130				
1,1,1-Trichloroethane	50.8		"	50.0		102	70-130				
1,1,2,2-Tetrachloroethane	47.7		"	50.0		95.3	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	51.0		"	50.0		102	70-130				
1,1,2-Trichloroethane	47.7		"	50.0		95.5	70-130				
1,1-Dichloroethane	47.2		"	50.0		94.4	70-130				
1,1-Dichloroethylene	50.0		"	50.0		100	70-130				
1,1-Dichloropropylene	49.2		"	50.0		98.3	70-130				
1,2,3-Trichlorobenzene	51.6		"	50.0		103	70-130				
1,2,3-Trichloropropane	49.0		"	50.0		98.0	70-130				
1,2,4-Trichlorobenzene	52.4		"	50.0		105	70-130				
1,2,4-Trimethylbenzene	51.2		"	50.0		102	70-130				
1,2-Dibromo-3-chloropropane	46.3		"	50.0		92.6	70-130				
1,2-Dibromoethane	50.3		"	50.0		101	70-130				
1,2-Dichlorobenzene	50.2		"	50.0		100	70-130				
1,2-Dichloroethane	48.7		"	50.0		97.4	70-130				
1,2-Dichloropropane	47.0		"	50.0		94.1	70-130				
1,3,5-Trimethylbenzene	52.2		"	50.0		104	70-130				
1,3-Dichlorobenzene	49.6		"	50.0		99.2	70-130				
1,3-Dichloropropane	48.0		"	50.0		96.1	70-130				
1,4-Dichlorobenzene	49.9		"	50.0		99.7	70-130				
2,2-Dichloropropane	51.3		"	50.0		103	70-130				
2-Butanone	46.2		"	50.0		92.4	70-130				
2-Chlorotoluene	49.6		"	50.0		99.1	70-130				
2-Hexanone	43.0		"	50.0		86.1	70-130				
4-Chlorotoluene	50.4		"	50.0		101	70-130				
4-Methyl-2-pentanone	44.4		"	50.0		88.9	70-130				
Acetone	33.8		"	50.0		67.6	70-130	Low Bias			
Acrylonitrile	44.6		"	50.0		89.1	70-130				
Benzene	50.7		"	50.0		101	70-130				
Bromobenzene	49.4		"	50.0		98.7	70-130				
Bromochloromethane	44.4		"	50.0		88.9	70-130				
Bromodichloromethane	48.9		"	50.0		97.8	70-130				
Bromoform	48.0		"	50.0		96.0	70-130				
Bromomethane	39.4		"	50.0		78.8	70-130				
Carbon disulfide	49.7		"	50.0		99.5	70-130				
Carbon tetrachloride	52.5		"	50.0		105	70-130				
Chlorobenzene	50.4		"	50.0		101	70-130				
Chloroethane	33.8		"	50.0		67.5	70-130	Low Bias			
Chloroform	49.4		"	50.0		98.9	70-130				
Chloromethane	48.3		"	50.0		96.6	70-130				
cis-1,2-Dichloroethylene	48.8		"	50.0		97.6	70-130				
cis-1,3-Dichloropropylene	47.1		"	50.0		94.1	70-130				
Dibromochloromethane	50.0		"	50.0		100	70-130				
Dibromomethane	46.6		"	50.0		93.3	70-130				
Dichlorodifluoromethane	51.6		"	50.0		103	70-130				
Ethyl Benzene	49.7		"	50.0		99.5	70-130				
Hexachlorobutadiene	50.5		"	50.0		101	70-130				
Isopropylbenzene	51.2		"	50.0		102	70-130				
Methyl Methacrylate	47.6		"	50.0		95.2	70-130				
Methyl tert-butyl ether (MTBE)	47.6		"	50.0		95.1	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40782 - EPA 5035A

LCS (BB40782-BS1)

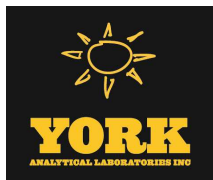
Prepared & Analyzed: 02/14/2024

Methylene chloride	43.6		ug/L	50.0		87.2	70-130				
Naphthalene	50.1		"	50.0		100	70-130				
n-Butylbenzene	47.7		"	50.0		95.4	70-130				
n-Propylbenzene	48.6		"	50.0		97.2	70-130				
o-Xylene	49.9		"	50.0		99.9	70-130				
p- & m- Xylenes	100		"	100		100	70-130				
p-Isopropyltoluene	51.0		"	50.0		102	70-130				
sec-Butylbenzene	50.3		"	50.0		101	70-130				
Styrene	48.0		"	50.0		95.9	70-130				
tert-Butylbenzene	51.3		"	50.0		103	70-130				
Tetrachloroethylene	39.0		"	50.0		78.1	70-130				
Tetrahydrofuran	44.5		"	50.0		89.0	70-130				
Toluene	49.8		"	50.0		99.7	70-130				
trans-1,2-Dichloroethylene	49.3		"	50.0		98.6	70-130				
trans-1,3-Dichloropropylene	47.9		"	50.0		95.8	70-130				
trans-1,4-dichloro-2-butene	47.8		"	50.0		95.7	70-130				
Trichloroethylene	49.7		"	50.0		99.4	70-130				
Trichlorofluoromethane	36.4		"	50.0		72.9	70-130				
Vinyl Chloride	43.8		"	50.0		87.6	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	46.5		"	50.0		92.9	70-130				
Surrogate: SURR: Toluene-d8	48.4		"	50.0		96.7	70-130				
Surrogate: SURR: p-Bromofluorobenzene	52.5		"	50.0		105	70-130				

LCS Dup (BB40782-BS1)

Prepared & Analyzed: 02/14/2024

1,1,1,2-Tetrachloroethane	51.6		ug/L	50.0		103	70-130		1.25	30	
1,1,1-Trichloroethane	51.0		"	50.0		102	70-130		0.393	30	
1,1,2,2-Tetrachloroethane	47.9		"	50.0		95.8	70-130		0.523	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	52.0		"	50.0		104	70-130		1.84	30	
1,1,2-Trichloroethane	48.7		"	50.0		97.3	70-130		1.93	30	
1,1-Dichloroethane	48.0		"	50.0		96.0	70-130		1.68	30	
1,1-Dichloroethylene	51.4		"	50.0		103	70-130		2.60	30	
1,1-Dichloropropylene	49.5		"	50.0		99.1	70-130		0.790	30	
1,2,3-Trichlorobenzene	50.9		"	50.0		102	70-130		1.35	30	
1,2,3-Trichloropropane	49.4		"	50.0		98.8	70-130		0.853	30	
1,2,4-Trichlorobenzene	52.0		"	50.0		104	70-130		0.843	30	
1,2,4-Trimethylbenzene	51.2		"	50.0		102	70-130		0.0195	30	
1,2-Dibromo-3-chloropropane	47.2		"	50.0		94.5	70-130		2.01	30	
1,2-Dibromoethane	51.2		"	50.0		102	70-130		1.69	30	
1,2-Dichlorobenzene	49.8		"	50.0		99.6	70-130		0.720	30	
1,2-Dichloroethane	48.9		"	50.0		97.8	70-130		0.410	30	
1,2-Dichloropropane	47.5		"	50.0		95.0	70-130		0.973	30	
1,3,5-Trimethylbenzene	51.7		"	50.0		103	70-130		1.12	30	
1,3-Dichlorobenzene	49.4		"	50.0		98.7	70-130		0.465	30	
1,3-Dichloropropane	49.0		"	50.0		98.0	70-130		1.98	30	
1,4-Dichlorobenzene	49.3		"	50.0		98.7	70-130		1.05	30	
2,2-Dichloropropane	52.2		"	50.0		104	70-130		1.80	30	
2-Butanone	49.8		"	50.0		99.7	70-130		7.60	30	
2-Chlorotoluene	49.2		"	50.0		98.4	70-130		0.729	30	
2-Hexanone	44.1		"	50.0		88.1	70-130		2.36	30	
4-Chlorotoluene	49.6		"	50.0		99.2	70-130		1.62	30	
4-Methyl-2-pentanone	45.0		"	50.0		90.1	70-130		1.32	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

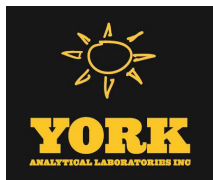
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BB40782 - EPA 5035A

LCS Dup (BB40782-BSD1)

Prepared & Analyzed: 02/14/2024

Acetone	34.7		ug/L	50.0		69.4	70-130	Low Bias	2.60	30	
Acrylonitrile	50.1		"	50.0		100	70-130		11.6	30	
Benzene	52.1		"	50.0		104	70-130		2.75	30	
Bromobenzene	49.7		"	50.0		99.3	70-130		0.626	30	
Bromochloromethane	45.8		"	50.0		91.6	70-130		2.99	30	
Bromodichloromethane	48.9		"	50.0		97.8	70-130		0.00	30	
Bromoform	50.2		"	50.0		100	70-130		4.38	30	
Bromomethane	40.3		"	50.0		80.6	70-130		2.21	30	
Carbon disulfide	50.4		"	50.0		101	70-130		1.22	30	
Carbon tetrachloride	53.6		"	50.0		107	70-130		2.15	30	
Chlorobenzene	51.1		"	50.0		102	70-130		1.30	30	
Chloroethane	34.0		"	50.0		68.0	70-130	Low Bias	0.679	30	
Chloroform	50.3		"	50.0		101	70-130		1.70	30	
Chloromethane	49.8		"	50.0		99.5	70-130		2.98	30	
cis-1,2-Dichloroethylene	49.6		"	50.0		99.1	70-130		1.59	30	
cis-1,3-Dichloropropylene	47.6		"	50.0		95.2	70-130		1.16	30	
Dibromochloromethane	50.7		"	50.0		101	70-130		1.47	30	
Dibromomethane	47.9		"	50.0		95.8	70-130		2.67	30	
Dichlorodifluoromethane	52.2		"	50.0		104	70-130		1.10	30	
Ethyl Benzene	50.2		"	50.0		100	70-130		0.881	30	
Hexachlorobutadiene	50.5		"	50.0		101	70-130		0.0198	30	
Isopropylbenzene	51.2		"	50.0		102	70-130		0.0781	30	
Methyl Methacrylate	48.8		"	50.0		97.7	70-130		2.57	30	
Methyl tert-butyl ether (MTBE)	49.5		"	50.0		99.0	70-130		4.02	30	
Methylene chloride	44.8		"	50.0		89.7	70-130		2.78	30	
Naphthalene	50.3		"	50.0		101	70-130		0.439	30	
n-Butylbenzene	46.8		"	50.0		93.6	70-130		1.88	30	
n-Propylbenzene	48.0		"	50.0		96.0	70-130		1.33	30	
o-Xylene	50.4		"	50.0		101	70-130		0.976	30	
p- & m- Xylenes	101		"	100		101	70-130		0.823	30	
p-Isopropyltoluene	50.5		"	50.0		101	70-130		1.01	30	
sec-Butylbenzene	49.7		"	50.0		99.5	70-130		1.06	30	
Styrene	48.9		"	50.0		97.7	70-130		1.88	30	
tert-Butylbenzene	50.5		"	50.0		101	70-130		1.61	30	
Tetrachloroethylene	39.4		"	50.0		78.7	70-130		0.791	30	
Tetrahydrofuran	45.6		"	50.0		91.2	70-130		2.44	30	
Toluene	49.9		"	50.0		99.9	70-130		0.200	30	
trans-1,2-Dichloroethylene	49.4		"	50.0		98.8	70-130		0.203	30	
trans-1,3-Dichloropropylene	48.0		"	50.0		96.0	70-130		0.188	30	
trans-1,4-dichloro-2-butene	48.2		"	50.0		96.5	70-130		0.853	30	
Trichloroethylene	51.0		"	50.0		102	70-130		2.54	30	
Trichlorofluoromethane	36.3		"	50.0		72.7	70-130		0.330	30	
Vinyl Chloride	44.4		"	50.0		88.7	70-130		1.23	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	47.6		"	50.0		95.2	70-130				
Surrogate: SURR: Toluene-d8	48.5		"	50.0		97.0	70-130				
Surrogate: SURR: p-Bromofluorobenzene	51.5		"	50.0		103	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

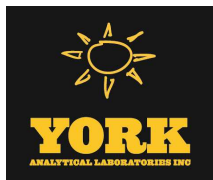
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40785 - EPA 5035A

Blank (BB40785-BLK1)

Prepared & Analyzed: 02/14/2024

1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet
1,1,1-Trichloroethane	ND	0.0050	"
1,1,2,2-Tetrachloroethane	ND	0.0050	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"
1,1,2-Trichloroethane	ND	0.0050	"
1,1-Dichloroethane	ND	0.0050	"
1,1-Dichloroethylene	ND	0.0050	"
1,1-Dichloropropylene	ND	0.0050	"
1,2,3-Trichlorobenzene	ND	0.0050	"
1,2,3-Trichloropropane	ND	0.0050	"
1,2,4-Trichlorobenzene	ND	0.0050	"
1,2,4-Trimethylbenzene	ND	0.0050	"
1,2-Dibromo-3-chloropropane	ND	0.0050	"
1,2-Dibromoethane	ND	0.0050	"
1,2-Dichlorobenzene	ND	0.0050	"
1,2-Dichloroethane	ND	0.0050	"
1,2-Dichloropropane	ND	0.0050	"
1,3,5-Trimethylbenzene	ND	0.0050	"
1,3-Dichlorobenzene	ND	0.0050	"
1,3-Dichloropropane	ND	0.0050	"
1,4-Dichlorobenzene	ND	0.0050	"
2,2-Dichloropropane	ND	0.0050	"
2-Butanone	ND	0.0050	"
2-Chlorotoluene	ND	0.0050	"
2-Hexanone	ND	0.0050	"
4-Chlorotoluene	ND	0.0050	"
4-Methyl-2-pentanone	ND	0.0050	"
Acetone	ND	0.010	"
Acrylonitrile	ND	0.0050	"
Benzene	ND	0.0050	"
Bromobenzene	ND	0.0050	"
Bromochloromethane	ND	0.0050	"
Bromodichloromethane	ND	0.0050	"
Bromoform	ND	0.0050	"
Bromomethane	ND	0.0050	"
Carbon disulfide	ND	0.0050	"
Carbon tetrachloride	ND	0.0050	"
Chlorobenzene	ND	0.0050	"
Chloroethane	ND	0.0050	"
Chloroform	ND	0.0050	"
Chloromethane	ND	0.0050	"
cis-1,2-Dichloroethylene	ND	0.0050	"
cis-1,3-Dichloropropylene	ND	0.0050	"
Dibromochloromethane	ND	0.0050	"
Dibromomethane	ND	0.0050	"
Dichlorodifluoromethane	ND	0.0050	"
Ethyl Benzene	ND	0.0050	"
Hexachlorobutadiene	ND	0.0050	"
Isopropylbenzene	ND	0.0050	"
Methyl Methacrylate	ND	0.0050	"
Methyl tert-butyl ether (MTBE)	ND	0.0050	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40785 - EPA 5035A

Blank (BB40785-BLK1)

Prepared & Analyzed: 02/14/2024

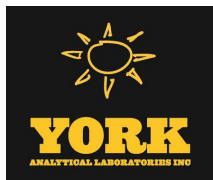
Methylene chloride	ND	0.010	mg/kg wet
Naphthalene	ND	0.010	"
n-Butylbenzene	ND	0.0050	"
n-Propylbenzene	ND	0.0050	"
o-Xylene	ND	0.0050	"
p- & m- Xylenes	ND	0.010	"
p-Isopropyltoluene	ND	0.0050	"
sec-Butylbenzene	ND	0.0050	"
Styrene	ND	0.0050	"
tert-Butylbenzene	ND	0.0050	"
Tetrachloroethylene	ND	0.0050	"
Tetrahydrofuran	ND	0.010	"
Toluene	ND	0.0050	"
trans-1,2-Dichloroethylene	ND	0.0050	"
trans-1,3-Dichloropropylene	ND	0.0050	"
trans-1,4-dichloro-2-butene	ND	0.0050	"
Trichloroethylene	ND	0.0050	"
Trichlorofluoromethane	ND	0.0050	"
Vinyl Chloride	ND	0.0050	"

Surrogate: SURR: 1,2-Dichloroethane-d4	53.0	ug/L	50.0	106	70-130
Surrogate: SURR: Toluene-d8	48.9	"	50.0	97.9	70-130
Surrogate: SURR: p-Bromofluorobenzene	47.5	"	50.0	94.9	70-130

LCS (BB40785-BS1)

Prepared & Analyzed: 02/14/2024

1,1,1,2-Tetrachloroethane	51.9	ug/L	50.0	104	70-130
1,1,1-Trichloroethane	54.5	"	50.0	109	70-130
1,1,2,2-Tetrachloroethane	52.4	"	50.0	105	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	61.1	"	50.0	122	70-130
1,1,2-Trichloroethane	51.0	"	50.0	102	70-130
1,1-Dichloroethane	53.5	"	50.0	107	70-130
1,1-Dichloroethylene	56.2	"	50.0	112	70-130
1,1-Dichloropropylene	55.0	"	50.0	110	70-130
1,2,3-Trichlorobenzene	46.8	"	50.0	93.6	70-130
1,2,3-Trichloropropane	52.0	"	50.0	104	70-130
1,2,4-Trichlorobenzene	46.0	"	50.0	92.1	70-130
1,2,4-Trimethylbenzene	49.4	"	50.0	98.8	70-130
1,2-Dibromo-3-chloropropane	44.5	"	50.0	88.9	70-130
1,2-Dibromoethane	52.3	"	50.0	105	70-130
1,2-Dichlorobenzene	50.2	"	50.0	100	70-130
1,2-Dichloroethane	55.4	"	50.0	111	70-130
1,2-Dichloropropane	49.6	"	50.0	99.2	70-130
1,3,5-Trimethylbenzene	49.8	"	50.0	99.6	70-130
1,3-Dichlorobenzene	49.1	"	50.0	98.2	70-130
1,3-Dichloropropane	51.7	"	50.0	103	70-130
1,4-Dichlorobenzene	48.3	"	50.0	96.6	70-130
2,2-Dichloropropane	51.0	"	50.0	102	70-130
2-Butanone	47.9	"	50.0	95.8	70-130
2-Chlorotoluene	49.3	"	50.0	98.6	70-130
2-Hexanone	43.4	"	50.0	86.7	70-130
4-Chlorotoluene	48.4	"	50.0	96.8	70-130
4-Methyl-2-pentanone	45.3	"	50.0	90.5	70-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

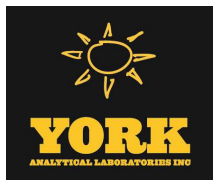
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40785 - EPA 5035A

LCS (BB40785-BS1)

Prepared & Analyzed: 02/14/2024

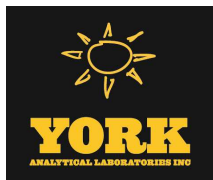
Acetone	43.7		ug/L	50.0		87.4	70-130				
Acrylonitrile	53.7		"	50.0		107	70-130				
Benzene	58.5		"	50.0		117	70-130				
Bromobenzene	48.3		"	50.0		96.7	70-130				
Bromochloromethane	52.8		"	50.0		106	70-130				
Bromodichloromethane	50.0		"	50.0		99.9	70-130				
Bromoform	49.7		"	50.0		99.4	70-130				
Bromomethane	59.4		"	50.0		119	70-130				
Carbon disulfide	58.1		"	50.0		116	70-130				
Carbon tetrachloride	56.6		"	50.0		113	70-130				
Chlorobenzene	53.8		"	50.0		108	70-130				
Chloroethane	60.8		"	50.0		122	70-130				
Chloroform	56.1		"	50.0		112	70-130				
Chloromethane	53.5		"	50.0		107	70-130				
cis-1,2-Dichloroethylene	54.2		"	50.0		108	70-130				
cis-1,3-Dichloropropylene	47.7		"	50.0		95.4	70-130				
Dibromochloromethane	51.0		"	50.0		102	70-130				
Dibromomethane	50.7		"	50.0		101	70-130				
Dichlorodifluoromethane	61.1		"	50.0		122	70-130				
Ethyl Benzene	53.4		"	50.0		107	70-130				
Hexachlorobutadiene	47.6		"	50.0		95.3	70-130				
Isopropylbenzene	51.6		"	50.0		103	70-130				
Methyl Methacrylate	48.6		"	50.0		97.3	70-130				
Methyl tert-butyl ether (MTBE)	50.8		"	50.0		102	70-130				
Methylene chloride	52.3		"	50.0		105	70-130				
Naphthalene	41.8		"	50.0		83.6	70-130				
n-Butylbenzene	49.3		"	50.0		98.5	70-130				
n-Propylbenzene	50.9		"	50.0		102	70-130				
o-Xylene	50.6		"	50.0		101	70-130				
p- & m- Xylenes	109		"	100		109	70-130				
p-Isopropyltoluene	51.0		"	50.0		102	70-130				
sec-Butylbenzene	51.3		"	50.0		103	70-130				
Styrene	51.3		"	50.0		103	70-130				
tert-Butylbenzene	49.9		"	50.0		99.8	70-130				
Tetrachloroethylene	46.0		"	50.0		92.1	70-130				
Tetrahydrofuran	49.4		"	50.0		98.9	70-130				
Toluene	53.4		"	50.0		107	70-130				
trans-1,2-Dichloroethylene	54.2		"	50.0		108	70-130				
trans-1,3-Dichloropropylene	48.0		"	50.0		96.0	70-130				
trans-1,4-dichloro-2-butene	50.4		"	50.0		101	70-130				
Trichloroethylene	49.8		"	50.0		99.6	70-130				
Trichlorofluoromethane	62.0		"	50.0		124	70-130				
Vinyl Chloride	58.8		"	50.0		118	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	50.0		"	50.0		100	70-130				
Surrogate: SURR: Toluene-d8	48.5		"	50.0		97.0	70-130				
Surrogate: SURR: p-Bromofluorobenzene	47.1		"	50.0		94.2	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40785 - EPA 5035A											
LCS Dup (BB40785-BSD1)						Prepared & Analyzed: 02/14/2024					
1,1,1,2-Tetrachloroethane	52.6		ug/L	50.0		105	70-130		1.30	30	
1,1,1-Trichloroethane	56.3		"	50.0		113	70-130		3.23	30	
1,1,2,2-Tetrachloroethane	53.7		"	50.0		107	70-130		2.49	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	62.6		"	50.0		125	70-130		2.28	30	
1,1,2-Trichloroethane	52.3		"	50.0		105	70-130		2.48	30	
1,1-Dichloroethane	54.7		"	50.0		109	70-130		2.22	30	
1,1-Dichloroethylene	57.8		"	50.0		116	70-130		2.81	30	
1,1-Dichloropropylene	56.8		"	50.0		114	70-130		3.09	30	
1,2,3-Trichlorobenzene	47.6		"	50.0		95.3	70-130		1.78	30	
1,2,3-Trichloropropane	53.4		"	50.0		107	70-130		2.79	30	
1,2,4-Trichlorobenzene	46.3		"	50.0		92.6	70-130		0.542	30	
1,2,4-Trimethylbenzene	49.7		"	50.0		99.4	70-130		0.585	30	
1,2-Dibromo-3-chloropropane	46.2		"	50.0		92.5	70-130		3.93	30	
1,2-Dibromoethane	53.0		"	50.0		106	70-130		1.40	30	
1,2-Dichlorobenzene	50.2		"	50.0		100	70-130		0.0996	30	
1,2-Dichloroethane	57.7		"	50.0		115	70-130		4.14	30	
1,2-Dichloropropane	50.5		"	50.0		101	70-130		1.90	30	
1,3,5-Trimethylbenzene	50.0		"	50.0		100	70-130		0.461	30	
1,3-Dichlorobenzene	49.6		"	50.0		99.3	70-130		1.07	30	
1,3-Dichloropropane	52.1		"	50.0		104	70-130		0.867	30	
1,4-Dichlorobenzene	48.8		"	50.0		97.6	70-130		0.968	30	
2,2-Dichloropropane	52.4		"	50.0		105	70-130		2.55	30	
2-Butanone	53.1		"	50.0		106	70-130		10.4	30	
2-Chlorotoluene	49.9		"	50.0		99.7	70-130		1.09	30	
2-Hexanone	43.8		"	50.0		87.7	70-130		1.08	30	
4-Chlorotoluene	48.8		"	50.0		97.7	70-130		0.864	30	
4-Methyl-2-pentanone	47.4		"	50.0		94.8	70-130		4.60	30	
Acetone	45.1		"	50.0		90.1	70-130		3.11	30	
Acrylonitrile	56.4		"	50.0		113	70-130		4.85	30	
Benzene	60.7		"	50.0		121	70-130		3.62	30	
Bromobenzene	49.1		"	50.0		98.2	70-130		1.56	30	
Bromochloromethane	55.5		"	50.0		111	70-130		5.04	30	
Bromodichloromethane	50.4		"	50.0		101	70-130		0.956	30	
Bromoform	51.3		"	50.0		103	70-130		3.11	30	
Bromomethane	61.2		"	50.0		122	70-130		3.00	30	
Carbon disulfide	60.0		"	50.0		120	70-130		3.10	30	
Carbon tetrachloride	58.5		"	50.0		117	70-130		3.23	30	
Chlorobenzene	54.0		"	50.0		108	70-130		0.390	30	
Chloroethane	62.7		"	50.0		125	70-130		3.08	30	
Chloroform	58.3		"	50.0		117	70-130		3.79	30	
Chloromethane	55.2		"	50.0		110	70-130		3.11	30	
cis-1,2-Dichloroethylene	55.9		"	50.0		112	70-130		3.01	30	
cis-1,3-Dichloropropylene	48.1		"	50.0		96.2	70-130		0.835	30	
Dibromochloromethane	52.5		"	50.0		105	70-130		2.90	30	
Dibromomethane	51.0		"	50.0		102	70-130		0.747	30	
Dichlorodifluoromethane	61.8		"	50.0		124	70-130		1.11	30	
Ethyl Benzene	53.9		"	50.0		108	70-130		0.876	30	
Hexachlorobutadiene	47.8		"	50.0		95.6	70-130		0.314	30	
Isopropylbenzene	51.7		"	50.0		103	70-130		0.252	30	
Methyl Methacrylate	50.1		"	50.0		100	70-130		2.94	30	
Methyl tert-butyl ether (MTBE)	53.4		"	50.0		107	70-130		5.03	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40785 - EPA 5035A

LCS Dup (BB40785-BSD1)

Prepared & Analyzed: 02/14/2024

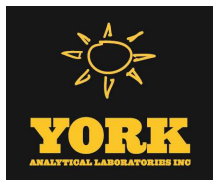
Methylene chloride	54.3		ug/L	50.0		109	70-130		3.77	30
Naphthalene	42.4		"	50.0		84.9	70-130		1.52	30
n-Butylbenzene	49.6		"	50.0		99.3	70-130		0.768	30
n-Propylbenzene	51.3		"	50.0		103	70-130		0.646	30
o-Xylene	51.2		"	50.0		102	70-130		1.10	30
p- & m- Xylenes	110		"	100		110	70-130		0.522	30
p-Isopropyltoluene	51.1		"	50.0		102	70-130		0.196	30
sec-Butylbenzene	51.6		"	50.0		103	70-130		0.661	30
Styrene	52.0		"	50.0		104	70-130		1.37	30
tert-Butylbenzene	49.9		"	50.0		99.8	70-130		0.0401	30
Tetrachloroethylene	46.8		"	50.0		93.7	70-130		1.77	30
Tetrahydrofuran	54.8		"	50.0		110	70-130		10.2	30
Toluene	54.3		"	50.0		109	70-130		1.71	30
trans-1,2-Dichloroethylene	55.9		"	50.0		112	70-130		3.05	30
trans-1,3-Dichloropropylene	48.5		"	50.0		97.0	70-130		0.974	30
trans-1,4-dichloro-2-butene	51.7		"	50.0		103	70-130		2.58	30
Trichloroethylene	50.7		"	50.0		101	70-130		1.83	30
Trichlorofluoromethane	65.1		"	50.0		130	70-130		4.93	30
Vinyl Chloride	61.0		"	50.0		122	70-130		3.69	30
Surrogate: SURR: 1,2-Dichloroethane-d4	51.7		"	50.0		103	70-130			
Surrogate: SURR: Toluene-d8	48.7		"	50.0		97.3	70-130			
Surrogate: SURR: p-Bromofluorobenzene	46.8		"	50.0		93.6	70-130			

Batch BB40848 - EPA 5035A

Blank (BB40848-BLK2)

Prepared & Analyzed: 02/15/2024

1,1,1,2-Tetrachloroethane	ND	0.50	mg/kg wet
1,1,1-Trichloroethane	ND	0.50	"
1,1,2,2-Tetrachloroethane	ND	0.50	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,1-Dichloroethylene	ND	0.50	"
1,1-Dichloropropylene	ND	0.50	"
1,2,3-Trichlorobenzene	ND	0.50	"
1,2,3-Trichloropropane	ND	0.50	"
1,2,4-Trichlorobenzene	ND	0.50	"
1,2,4-Trimethylbenzene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
1,3,5-Trimethylbenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,3-Dichloropropane	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
2,2-Dichloropropane	ND	0.50	"
2-Butanone	ND	0.50	"
2-Chlorotoluene	ND	0.50	"
2-Hexanone	ND	0.50	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

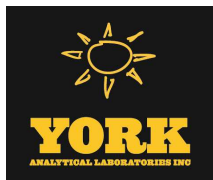
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40848 - EPA 5035A

Blank (BB40848-BLK2)

Prepared & Analyzed: 02/15/2024

4-Chlorotoluene	ND	0.50	mg/kg wet								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	ND	1.0	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromobenzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl Methacrylate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylene chloride	ND	1.0	"								
Naphthalene	ND	1.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Tetrahydrofuran	ND	1.0	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	48.8		ug/L	50.0		97.7	70-130				
Surrogate: SURR: Toluene-d8	47.6		"	50.0		95.1	70-130				
Surrogate: SURR: p-Bromofluorobenzene	54.4		"	50.0		109	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

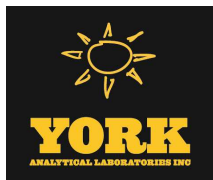
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40848 - EPA 5035A

LCS (BB40848-BS2)

Prepared & Analyzed: 02/15/2024

1,1,1,2-Tetrachloroethane	55.0		ug/L	50.0		110	70-130				
1,1,1-Trichloroethane	58.5		"	50.0		117	70-130				
1,1,2,2-Tetrachloroethane	48.9		"	50.0		97.7	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	61.3		"	50.0		123	70-130				
1,1,2-Trichloroethane	51.9		"	50.0		104	70-130				
1,1-Dichloroethane	53.2		"	50.0		106	70-130				
1,1-Dichloroethylene	55.8		"	50.0		112	70-130				
1,1-Dichloropropylene	55.4		"	50.0		111	70-130				
1,2,3-Trichlorobenzene	57.0		"	50.0		114	70-130				
1,2,3-Trichloropropane	49.8		"	50.0		99.5	70-130				
1,2,4-Trichlorobenzene	57.6		"	50.0		115	70-130				
1,2,4-Trimethylbenzene	52.6		"	50.0		105	70-130				
1,2-Dibromo-3-chloropropane	47.4		"	50.0		94.8	70-130				
1,2-Dibromoethane	55.1		"	50.0		110	70-130				
1,2-Dichlorobenzene	53.3		"	50.0		107	70-130				
1,2-Dichloroethane	54.7		"	50.0		109	70-130				
1,2-Dichloropropane	48.5		"	50.0		97.1	70-130				
1,3,5-Trimethylbenzene	52.9		"	50.0		106	70-130				
1,3-Dichlorobenzene	52.9		"	50.0		106	70-130				
1,3-Dichloropropane	50.6		"	50.0		101	70-130				
1,4-Dichlorobenzene	53.1		"	50.0		106	70-130				
2,2-Dichloropropane	57.9		"	50.0		116	70-130				
2-Butanone	58.9		"	50.0		118	70-130				
2-Chlorotoluene	48.1		"	50.0		96.3	70-130				
2-Hexanone	45.6		"	50.0		91.1	70-130				
4-Chlorotoluene	50.0		"	50.0		100	70-130				
4-Methyl-2-pentanone	44.1		"	50.0		88.1	70-130				
Acetone	41.4		"	50.0		82.8	70-130				
Acrylonitrile	54.8		"	50.0		110	70-130				
Benzene	57.4		"	50.0		115	70-130				
Bromobenzene	48.3		"	50.0		96.7	70-130				
Bromochloromethane	49.0		"	50.0		98.0	70-130				
Bromodichloromethane	50.2		"	50.0		100	70-130				
Bromoform	57.8		"	50.0		116	70-130				
Bromomethane	44.0		"	50.0		88.1	70-130				
Carbon disulfide	58.9		"	50.0		118	70-130				
Carbon tetrachloride	61.9		"	50.0		124	70-130				
Chlorobenzene	53.6		"	50.0		107	70-130				
Chloroethane	38.8		"	50.0		77.5	70-130				
Chloroform	56.7		"	50.0		113	70-130				
Chloromethane	55.0		"	50.0		110	70-130				
cis-1,2-Dichloroethylene	54.2		"	50.0		108	70-130				
cis-1,3-Dichloropropylene	49.4		"	50.0		98.8	70-130				
Dibromochloromethane	54.8		"	50.0		110	70-130				
Dibromomethane	49.4		"	50.0		98.7	70-130				
Dichlorodifluoromethane	75.5		"	50.0		151	70-130	High Bias			
Ethyl Benzene	51.6		"	50.0		103	70-130				
Hexachlorobutadiene	58.2		"	50.0		116	70-130				
Isopropylbenzene	51.9		"	50.0		104	70-130				
Methyl Methacrylate	50.6		"	50.0		101	70-130				
Methyl tert-butyl ether (MTBE)	55.2		"	50.0		110	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40848 - EPA 5035A

LCS (BB40848-BS2)

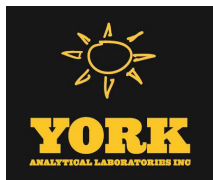
Prepared & Analyzed: 02/15/2024

Methylene chloride	46.4		ug/L	50.0		92.8	70-130				
Naphthalene	54.5		"	50.0		109	70-130				
n-Butylbenzene	48.3		"	50.0		96.7	70-130				
n-Propylbenzene	48.8		"	50.0		97.7	70-130				
o-Xylene	53.0		"	50.0		106	70-130				
p- & m- Xylenes	103		"	100		103	70-130				
p-Isopropyltoluene	52.8		"	50.0		106	70-130				
sec-Butylbenzene	51.5		"	50.0		103	70-130				
Styrene	52.9		"	50.0		106	70-130				
tert-Butylbenzene	52.6		"	50.0		105	70-130				
Tetrachloroethylene	40.6		"	50.0		81.2	70-130				
Tetrahydrofuran	48.9		"	50.0		97.8	70-130				
Toluene	51.8		"	50.0		104	70-130				
trans-1,2-Dichloroethylene	54.7		"	50.0		109	70-130				
trans-1,3-Dichloropropylene	50.5		"	50.0		101	70-130				
trans-1,4-dichloro-2-butene	48.6		"	50.0		97.1	70-130				
Trichloroethylene	52.0		"	50.0		104	70-130				
Trichlorofluoromethane	42.0		"	50.0		84.0	70-130				
Vinyl Chloride	57.1		"	50.0		114	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	47.6		"	50.0		95.1	70-130				
Surrogate: SURR: Toluene-d8	46.4		"	50.0		92.8	70-130				
Surrogate: SURR: p-Bromofluorobenzene	48.8		"	50.0		97.6	70-130				

LCS Dup (BB40848-BS2)

Prepared & Analyzed: 02/15/2024

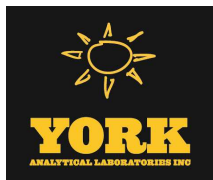
1,1,1,2-Tetrachloroethane	56.2		ug/L	50.0		112	70-130		2.18	30	
1,1,1-Trichloroethane	57.9		"	50.0		116	70-130		0.979	30	
1,1,2,2-Tetrachloroethane	50.3		"	50.0		101	70-130		2.94	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	61.6		"	50.0		123	70-130		0.537	30	
1,1,2-Trichloroethane	53.3		"	50.0		107	70-130		2.76	30	
1,1-Dichloroethane	52.8		"	50.0		106	70-130		0.754	30	
1,1-Dichloroethylene	55.1		"	50.0		110	70-130		1.39	30	
1,1-Dichloropropylene	55.5		"	50.0		111	70-130		0.0902	30	
1,2,3-Trichlorobenzene	58.8		"	50.0		118	70-130		3.04	30	
1,2,3-Trichloropropane	52.4		"	50.0		105	70-130		5.09	30	
1,2,4-Trichlorobenzene	59.4		"	50.0		119	70-130		3.11	30	
1,2,4-Trimethylbenzene	52.5		"	50.0		105	70-130		0.0951	30	
1,2-Dibromo-3-chloropropane	48.6		"	50.0		97.3	70-130		2.58	30	
1,2-Dibromoethane	56.5		"	50.0		113	70-130		2.42	30	
1,2-Dichlorobenzene	53.9		"	50.0		108	70-130		1.12	30	
1,2-Dichloroethane	54.2		"	50.0		108	70-130		0.826	30	
1,2-Dichloropropane	49.1		"	50.0		98.1	70-130		1.09	30	
1,3,5-Trimethylbenzene	53.0		"	50.0		106	70-130		0.189	30	
1,3-Dichlorobenzene	53.4		"	50.0		107	70-130		1.02	30	
1,3-Dichloropropane	52.1		"	50.0		104	70-130		2.88	30	
1,4-Dichlorobenzene	53.5		"	50.0		107	70-130		0.694	30	
2,2-Dichloropropane	57.6		"	50.0		115	70-130		0.520	30	
2-Butanone	57.9		"	50.0		116	70-130		1.64	30	
2-Chlorotoluene	49.1		"	50.0		98.3	70-130		2.06	30	
2-Hexanone	46.5		"	50.0		93.0	70-130		2.09	30	
4-Chlorotoluene	50.2		"	50.0		100	70-130		0.339	30	
4-Methyl-2-pentanone	47.0		"	50.0		94.0	70-130		6.48	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40848 - EPA 5035A											
LCS Dup (BB40848-BSD2)						Prepared & Analyzed: 02/15/2024					
Acetone	40.9		ug/L	50.0		81.8	70-130		1.19	30	
Acrylonitrile	57.7		"	50.0		115	70-130		5.19	30	
Benzene	57.4		"	50.0		115	70-130		0.0174	30	
Bromobenzene	48.2		"	50.0		96.4	70-130		0.290	30	
Bromochloromethane	49.8		"	50.0		99.6	70-130		1.64	30	
Bromodichloromethane	51.7		"	50.0		103	70-130		2.96	30	
Bromoform	59.8		"	50.0		120	70-130		3.47	30	
Bromomethane	40.7		"	50.0		81.3	70-130		7.98	30	
Carbon disulfide	58.5		"	50.0		117	70-130		0.681	30	
Carbon tetrachloride	61.7		"	50.0		123	70-130		0.388	30	
Chlorobenzene	54.1		"	50.0		108	70-130		0.854	30	
Chloroethane	35.2		"	50.0		70.4	70-130		9.66	30	
Chloroform	56.1		"	50.0		112	70-130		1.12	30	
Chloromethane	57.2		"	50.0		114	70-130		3.96	30	
cis-1,2-Dichloroethylene	53.5		"	50.0		107	70-130		1.45	30	
cis-1,3-Dichloropropylene	50.5		"	50.0		101	70-130		2.12	30	
Dibromochloromethane	55.3		"	50.0		111	70-130		0.854	30	
Dibromomethane	51.2		"	50.0		102	70-130		3.56	30	
Dichlorodifluoromethane	77.5		"	50.0		155	70-130	High Bias	2.56	30	
Ethyl Benzene	52.2		"	50.0		104	70-130		1.14	30	
Hexachlorobutadiene	59.6		"	50.0		119	70-130		2.50	30	
Isopropylbenzene	52.2		"	50.0		104	70-130		0.577	30	
Methyl Methacrylate	51.6		"	50.0		103	70-130		2.13	30	
Methyl tert-butyl ether (MTBE)	56.1		"	50.0		112	70-130		1.58	30	
Methylene chloride	46.6		"	50.0		93.3	70-130		0.516	30	
Naphthalene	57.0		"	50.0		114	70-130		4.47	30	
n-Butylbenzene	47.9		"	50.0		95.9	70-130		0.831	30	
n-Propylbenzene	49.1		"	50.0		98.3	70-130		0.612	30	
o-Xylene	53.7		"	50.0		107	70-130		1.37	30	
p- & m- Xylenes	105		"	100		105	70-130		1.12	30	
p-Isopropyltoluene	53.2		"	50.0		106	70-130		0.887	30	
sec-Butylbenzene	51.6		"	50.0		103	70-130		0.0776	30	
Styrene	53.6		"	50.0		107	70-130		1.37	30	
tert-Butylbenzene	52.8		"	50.0		106	70-130		0.474	30	
Tetrachloroethylene	41.2		"	50.0		82.4	70-130		1.56	30	
Tetrahydrofuran	51.3		"	50.0		103	70-130		4.79	30	
Toluene	51.9		"	50.0		104	70-130		0.116	30	
trans-1,2-Dichloroethylene	54.8		"	50.0		110	70-130		0.164	30	
trans-1,3-Dichloropropylene	51.0		"	50.0		102	70-130		0.828	30	
trans-1,4-dichloro-2-butene	50.2		"	50.0		100	70-130		3.30	30	
Trichloroethylene	53.2		"	50.0		106	70-130		2.30	30	
Trichlorofluoromethane	39.4		"	50.0		78.8	70-130		6.31	30	
Vinyl Chloride	58.7		"	50.0		117	70-130		2.76	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	47.0		"	50.0		94.0	70-130				
Surrogate: SURR: Toluene-d8	46.8		"	50.0		93.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	48.8		"	50.0		97.7	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

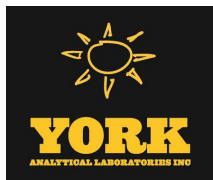
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40900 - EPA 5035A

Blank (BB40900-BLK1)

Prepared & Analyzed: 02/15/2024

1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet
1,1,1-Trichloroethane	ND	0.0050	"
1,1,2,2-Tetrachloroethane	ND	0.0050	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"
1,1,2-Trichloroethane	ND	0.0050	"
1,1-Dichloroethane	ND	0.0050	"
1,1-Dichloroethylene	ND	0.0050	"
1,1-Dichloropropylene	ND	0.0050	"
1,2,3-Trichlorobenzene	ND	0.0050	"
1,2,3-Trichloropropane	ND	0.0050	"
1,2,4-Trichlorobenzene	ND	0.0050	"
1,2,4-Trimethylbenzene	ND	0.0050	"
1,2-Dibromo-3-chloropropane	ND	0.0050	"
1,2-Dibromoethane	ND	0.0050	"
1,2-Dichlorobenzene	ND	0.0050	"
1,2-Dichloroethane	ND	0.0050	"
1,2-Dichloropropane	ND	0.0050	"
1,3,5-Trimethylbenzene	ND	0.0050	"
1,3-Dichlorobenzene	ND	0.0050	"
1,3-Dichloropropane	ND	0.0050	"
1,4-Dichlorobenzene	ND	0.0050	"
2,2-Dichloropropane	ND	0.0050	"
2-Butanone	ND	0.0050	"
2-Chlorotoluene	ND	0.0050	"
2-Hexanone	ND	0.0050	"
4-Chlorotoluene	ND	0.0050	"
4-Methyl-2-pentanone	ND	0.0050	"
Acetone	ND	0.010	"
Acrylonitrile	ND	0.0050	"
Benzene	ND	0.0050	"
Bromobenzene	ND	0.0050	"
Bromochloromethane	ND	0.0050	"
Bromodichloromethane	ND	0.0050	"
Bromoform	ND	0.0050	"
Bromomethane	ND	0.0050	"
Carbon disulfide	ND	0.0050	"
Carbon tetrachloride	ND	0.0050	"
Chlorobenzene	ND	0.0050	"
Chloroethane	ND	0.0050	"
Chloroform	ND	0.0050	"
Chloromethane	ND	0.0050	"
cis-1,2-Dichloroethylene	ND	0.0050	"
cis-1,3-Dichloropropylene	ND	0.0050	"
Dibromochloromethane	ND	0.0050	"
Dibromomethane	ND	0.0050	"
Dichlorodifluoromethane	ND	0.0050	"
Ethyl Benzene	ND	0.0050	"
Hexachlorobutadiene	ND	0.0050	"
Isopropylbenzene	ND	0.0050	"
Methyl Methacrylate	ND	0.0050	"
Methyl tert-butyl ether (MTBE)	ND	0.0050	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40900 - EPA 5035A

Blank (BB40900-BLK1)

Prepared & Analyzed: 02/15/2024

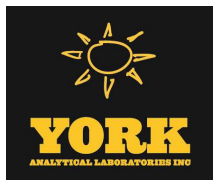
Methylene chloride	ND	0.010	mg/kg wet
Naphthalene	ND	0.010	"
n-Butylbenzene	ND	0.0050	"
n-Propylbenzene	ND	0.0050	"
o-Xylene	ND	0.0050	"
p- & m- Xylenes	ND	0.010	"
p-Isopropyltoluene	ND	0.0050	"
sec-Butylbenzene	ND	0.0050	"
Styrene	ND	0.0050	"
tert-Butylbenzene	ND	0.0050	"
Tetrachloroethylene	ND	0.0050	"
Tetrahydrofuran	ND	0.010	"
Toluene	ND	0.0050	"
trans-1,2-Dichloroethylene	ND	0.0050	"
trans-1,3-Dichloropropylene	ND	0.0050	"
trans-1,4-dichloro-2-butene	ND	0.0050	"
Trichloroethylene	ND	0.0050	"
Trichlorofluoromethane	ND	0.0050	"
Vinyl Chloride	ND	0.0050	"

Surrogate: SURR: 1,2-Dichloroethane-d4	50.7	ug/L	50.0	101	70-130
Surrogate: SURR: Toluene-d8	48.2	"	50.0	96.4	70-130
Surrogate: SURR: p-Bromofluorobenzene	47.8	"	50.0	95.6	70-130

LCS (BB40900-BS1)

Prepared & Analyzed: 02/15/2024

1,1,1,2-Tetrachloroethane	53.8	ug/L	50.0	108	70-130
1,1,1-Trichloroethane	58.1	"	50.0	116	70-130
1,1,2,2-Tetrachloroethane	53.8	"	50.0	108	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	65.2	"	50.0	130	70-130
1,1,2-Trichloroethane	52.5	"	50.0	105	70-130
1,1-Dichloroethane	55.5	"	50.0	111	70-130
1,1-Dichloroethylene	60.2	"	50.0	120	70-130
1,1-Dichloropropylene	58.4	"	50.0	117	70-130
1,2,3-Trichlorobenzene	50.4	"	50.0	101	70-130
1,2,3-Trichloropropane	53.0	"	50.0	106	70-130
1,2,4-Trichlorobenzene	50.1	"	50.0	100	70-130
1,2,4-Trimethylbenzene	51.7	"	50.0	103	70-130
1,2-Dibromo-3-chloropropane	45.7	"	50.0	91.3	70-130
1,2-Dibromoethane	53.5	"	50.0	107	70-130
1,2-Dichlorobenzene	52.3	"	50.0	105	70-130
1,2-Dichloroethane	58.4	"	50.0	117	70-130
1,2-Dichloropropane	50.1	"	50.0	100	70-130
1,3,5-Trimethylbenzene	51.7	"	50.0	103	70-130
1,3-Dichlorobenzene	51.8	"	50.0	104	70-130
1,3-Dichloropropane	52.0	"	50.0	104	70-130
1,4-Dichlorobenzene	51.4	"	50.0	103	70-130
2,2-Dichloropropane	54.9	"	50.0	110	70-130
2-Butanone	52.4	"	50.0	105	70-130
2-Chlorotoluene	50.9	"	50.0	102	70-130
2-Hexanone	44.2	"	50.0	88.3	70-130
4-Chlorotoluene	50.4	"	50.0	101	70-130
4-Methyl-2-pentanone	46.7	"	50.0	93.4	70-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

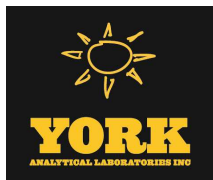
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40900 - EPA 5035A

LCS (BB40900-BS1)

Prepared & Analyzed: 02/15/2024

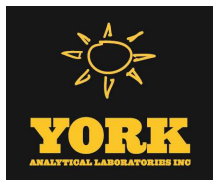
Acetone	45.9		ug/L	50.0		91.9	70-130				
Acrylonitrile	53.9		"	50.0		108	70-130				
Benzene	61.6		"	50.0		123	70-130				
Bromobenzene	49.9		"	50.0		99.8	70-130				
Bromochloromethane	55.5		"	50.0		111	70-130				
Bromodichloromethane	51.7		"	50.0		103	70-130				
Bromoform	52.1		"	50.0		104	70-130				
Bromomethane	67.1		"	50.0		134	70-130	High Bias			
Carbon disulfide	62.5		"	50.0		125	70-130				
Carbon tetrachloride	60.6		"	50.0		121	70-130				
Chlorobenzene	55.2		"	50.0		110	70-130				
Chloroethane	65.9		"	50.0		132	70-130	High Bias			
Chloroform	59.0		"	50.0		118	70-130				
Chloromethane	59.8		"	50.0		120	70-130				
cis-1,2-Dichloroethylene	56.6		"	50.0		113	70-130				
cis-1,3-Dichloropropylene	49.4		"	50.0		98.9	70-130				
Dibromochloromethane	53.4		"	50.0		107	70-130				
Dibromomethane	51.4		"	50.0		103	70-130				
Dichlorodifluoromethane	79.4		"	50.0		159	70-130	High Bias			
Ethyl Benzene	55.0		"	50.0		110	70-130				
Hexachlorobutadiene	50.3		"	50.0		101	70-130				
Isopropylbenzene	52.9		"	50.0		106	70-130				
Methyl Methacrylate	49.7		"	50.0		99.4	70-130				
Methyl tert-butyl ether (MTBE)	54.6		"	50.0		109	70-130				
Methylene chloride	54.5		"	50.0		109	70-130				
Naphthalene	45.2		"	50.0		90.3	70-130				
n-Butylbenzene	51.6		"	50.0		103	70-130				
n-Propylbenzene	52.5		"	50.0		105	70-130				
o-Xylene	52.5		"	50.0		105	70-130				
p- & m- Xylenes	113		"	100		113	70-130				
p-Isopropyltoluene	53.0		"	50.0		106	70-130				
sec-Butylbenzene	52.7		"	50.0		105	70-130				
Styrene	53.5		"	50.0		107	70-130				
tert-Butylbenzene	51.2		"	50.0		102	70-130				
Tetrachloroethylene	48.4		"	50.0		96.9	70-130				
Tetrahydrofuran	55.2		"	50.0		110	70-130				
Toluene	54.9		"	50.0		110	70-130				
trans-1,2-Dichloroethylene	57.5		"	50.0		115	70-130				
trans-1,3-Dichloropropylene	49.0		"	50.0		98.0	70-130				
trans-1,4-dichloro-2-butene	52.0		"	50.0		104	70-130				
Trichloroethylene	52.2		"	50.0		104	70-130				
Trichlorofluoromethane	69.3		"	50.0		139	70-130	High Bias			
Vinyl Chloride	64.8		"	50.0		130	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	51.1		"	50.0		102	70-130				
Surrogate: SURR: Toluene-d8	48.3		"	50.0		96.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	47.2		"	50.0		94.3	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BB40900 - EPA 5035A											
LCS Dup (BB40900-BSD1)						Prepared & Analyzed: 02/15/2024					
1,1,1,2-Tetrachloroethane	53.5		ug/L	50.0		107	70-130		0.615	30	
1,1,1-Trichloroethane	58.3		"	50.0		117	70-130		0.361	30	
1,1,2,2-Tetrachloroethane	53.2		"	50.0		106	70-130		1.20	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	64.6		"	50.0		129	70-130		0.986	30	
1,1,2-Trichloroethane	53.2		"	50.0		106	70-130		1.30	30	
1,1-Dichloroethane	55.0		"	50.0		110	70-130		0.868	30	
1,1-Dichloroethylene	59.1		"	50.0		118	70-130		1.79	30	
1,1-Dichloropropylene	57.6		"	50.0		115	70-130		1.33	30	
1,2,3-Trichlorobenzene	49.8		"	50.0		99.5	70-130		1.22	30	
1,2,3-Trichloropropane	53.4		"	50.0		107	70-130		0.808	30	
1,2,4-Trichlorobenzene	49.2		"	50.0		98.5	70-130		1.69	30	
1,2,4-Trimethylbenzene	51.5		"	50.0		103	70-130		0.349	30	
1,2-Dibromo-3-chloropropane	45.9		"	50.0		91.8	70-130		0.481	30	
1,2-Dibromoethane	53.3		"	50.0		107	70-130		0.468	30	
1,2-Dichlorobenzene	51.7		"	50.0		103	70-130		1.19	30	
1,2-Dichloroethane	58.1		"	50.0		116	70-130		0.464	30	
1,2-Dichloropropane	50.1		"	50.0		100	70-130		0.0200	30	
1,3,5-Trimethylbenzene	51.1		"	50.0		102	70-130		1.19	30	
1,3-Dichlorobenzene	51.2		"	50.0		102	70-130		1.15	30	
1,3-Dichloropropane	52.3		"	50.0		105	70-130		0.537	30	
1,4-Dichlorobenzene	50.6		"	50.0		101	70-130		1.61	30	
2,2-Dichloropropane	54.4		"	50.0		109	70-130		0.860	30	
2-Butanone	50.3		"	50.0		101	70-130		4.13	30	
2-Chlorotoluene	50.7		"	50.0		101	70-130		0.335	30	
2-Hexanone	43.8		"	50.0		87.6	70-130		0.864	30	
4-Chlorotoluene	50.0		"	50.0		100	70-130		0.817	30	
4-Methyl-2-pentanone	46.4		"	50.0		92.9	70-130		0.537	30	
Acetone	43.8		"	50.0		87.6	70-130		4.72	30	
Acrylonitrile	54.3		"	50.0		109	70-130		0.684	30	
Benzene	61.3		"	50.0		123	70-130		0.618	30	
Bromobenzene	49.9		"	50.0		99.8	70-130		0.0601	30	
Bromochloromethane	54.8		"	50.0		110	70-130		1.18	30	
Bromodichloromethane	51.1		"	50.0		102	70-130		1.03	30	
Bromoform	51.8		"	50.0		104	70-130		0.635	30	
Bromomethane	66.0		"	50.0		132	70-130	High Bias	1.68	30	
Carbon disulfide	61.8		"	50.0		124	70-130		1.24	30	
Carbon tetrachloride	59.8		"	50.0		120	70-130		1.33	30	
Chlorobenzene	54.9		"	50.0		110	70-130		0.527	30	
Chloroethane	64.9		"	50.0		130	70-130		1.47	30	
Chloroform	58.8		"	50.0		118	70-130		0.204	30	
Chloromethane	59.0		"	50.0		118	70-130		1.41	30	
cis-1,2-Dichloroethylene	56.1		"	50.0		112	70-130		0.905	30	
cis-1,3-Dichloropropylene	49.0		"	50.0		98.1	70-130		0.812	30	
Dibromochloromethane	53.3		"	50.0		107	70-130		0.319	30	
Dibromomethane	51.2		"	50.0		102	70-130		0.449	30	
Dichlorodifluoromethane	78.1		"	50.0		156	70-130	High Bias	1.70	30	
Ethyl Benzene	54.5		"	50.0		109	70-130		0.896	30	
Hexachlorobutadiene	49.7		"	50.0		99.4	70-130		1.20	30	
Isopropylbenzene	53.1		"	50.0		106	70-130		0.434	30	
Methyl Methacrylate	50.2		"	50.0		100	70-130		0.961	30	
Methyl tert-butyl ether (MTBE)	53.8		"	50.0		108	70-130		1.57	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

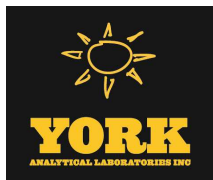
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40900 - EPA 5035A

LCS Dup (BB40900-BSD1)

Prepared & Analyzed: 02/15/2024

Methylene chloride	53.9		ug/L	50.0		108	70-130		1.09	30
Naphthalene	44.4		"	50.0		88.8	70-130		1.74	30
n-Butylbenzene	50.9		"	50.0		102	70-130		1.23	30
n-Propylbenzene	52.1		"	50.0		104	70-130		0.726	30
o-Xylene	51.9		"	50.0		104	70-130		1.07	30
p- & m- Xylenes	112		"	100		112	70-130		0.982	30
p-Isopropyltoluene	53.0		"	50.0		106	70-130		0.0755	30
sec-Butylbenzene	52.3		"	50.0		105	70-130		0.685	30
Styrene	52.8		"	50.0		106	70-130		1.34	30
tert-Butylbenzene	51.3		"	50.0		103	70-130		0.0585	30
Tetrachloroethylene	48.1		"	50.0		96.3	70-130		0.621	30
Tetrahydrofuran	54.1		"	50.0		108	70-130		2.05	30
Toluene	54.8		"	50.0		110	70-130		0.237	30
trans-1,2-Dichloroethylene	56.4		"	50.0		113	70-130		1.79	30
trans-1,3-Dichloropropylene	49.3		"	50.0		98.5	70-130		0.550	30
trans-1,4-dichloro-2-butene	51.7		"	50.0		103	70-130		0.598	30
Trichloroethylene	52.2		"	50.0		104	70-130		0.153	30
Trichlorofluoromethane	67.9		"	50.0		136	70-130	High Bias	2.13	30
Vinyl Chloride	63.6		"	50.0		127	70-130		1.84	30
Surrogate: SURR: 1,2-Dichloroethane-d4	51.1		"	50.0		102	70-130			
Surrogate: SURR: Toluene-d8	48.0		"	50.0		96.0	70-130			
Surrogate: SURR: p-Bromofluorobenzene	47.2		"	50.0		94.4	70-130			



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40573 - EPA 3546- SVOA RCP

Blank (BB40573-BLK1)

Prepared: 02/09/2024 Analyzed: 02/12/2024

2-Methylnaphthalene	ND	0.249	mg/kg wet								
Acenaphthene	ND	0.249	"								
Acenaphthylene	ND	0.249	"								
Anthracene	ND	0.249	"								
Benzo(a)anthracene	ND	0.249	"								
Benzo(a)pyrene	ND	0.249	"								
Benzo(b)fluoranthene	ND	0.249	"								
Benzo(g,h,i)perylene	ND	0.249	"								
Benzo(k)fluoranthene	ND	0.249	"								
Chrysene	ND	0.249	"								
Dibenzo(a,h)anthracene	ND	0.249	"								
Fluoranthene	ND	0.249	"								
Fluorene	ND	0.249	"								
Indeno(1,2,3-cd)pyrene	ND	0.249	"								
Naphthalene	ND	0.249	"								
Phenanthrene	ND	0.249	"								
Pyrene	ND	0.249	"								

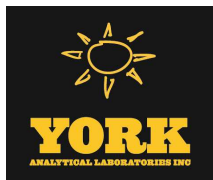
Surrogate: SURR: Nitrobenzene-d5	1.01		"	1.24		81.5	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	0.989		"	1.24		79.5	30-130				
Surrogate: SURR: Terphenyl-d14	1.03		"	1.24		82.8	30-130				

LCS (BB40573-BS1)

Prepared: 02/09/2024 Analyzed: 02/12/2024

2-Methylnaphthalene	1.00	0.249	mg/kg wet	1.24		80.6	40-140				
Acenaphthene	0.920	0.249	"	1.24		74.0	40-140				
Acenaphthylene	0.889	0.249	"	1.24		71.4	40-140				
Anthracene	0.941	0.249	"	1.24		75.7	40-140				
Benzo(a)anthracene	0.977	0.249	"	1.24		78.6	40-140				
Benzo(a)pyrene	0.955	0.249	"	1.24		76.8	40-140				
Benzo(b)fluoranthene	0.976	0.249	"	1.24		78.5	40-140				
Benzo(g,h,i)perylene	1.05	0.249	"	1.24		84.6	40-140				
Benzo(k)fluoranthene	1.03	0.249	"	1.24		83.2	40-140				
Chrysene	0.948	0.249	"	1.24		76.2	40-140				
Dibenzo(a,h)anthracene	1.06	0.249	"	1.24		85.2	40-140				
Fluoranthene	0.954	0.249	"	1.24		76.7	40-140				
Fluorene	0.948	0.249	"	1.24		76.2	40-140				
Indeno(1,2,3-cd)pyrene	1.24	0.249	"	1.24		99.9	40-140				
Naphthalene	0.952	0.249	"	1.24		76.5	40-140				
Phenanthrene	0.949	0.249	"	1.24		76.3	40-140				
Pyrene	0.977	0.249	"	1.24		78.5	40-140				

Surrogate: SURR: Nitrobenzene-d5	1.02		"	1.24		82.3	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	1.02		"	1.24		82.1	30-130				
Surrogate: SURR: Terphenyl-d14	1.08		"	1.24		86.4	30-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

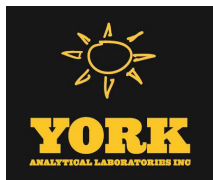
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40573 - EPA 3546- SVOA RCP

Matrix Spike (BB40573-MS1)		*Source sample: 24B0405-26 (DUP)					Prepared: 02/09/2024 Analyzed: 02/12/2024				
2-Methylnaphthalene	1.19	0.545	mg/kg dry	1.36	ND	87.0	40-140				
Acenaphthene	1.11	0.545	"	1.36	ND	81.2	40-140				
Acenaphthylene	1.06	0.545	"	1.36	ND	77.9	40-140				
Anthracene	1.07	0.545	"	1.36	ND	78.7	40-140				
Benzo(a)anthracene	1.17	0.545	"	1.36	ND	86.2	40-140				
Benzo(a)pyrene	1.19	0.545	"	1.36	ND	87.5	40-140				
Benzo(b)fluoranthene	1.23	0.545	"	1.36	ND	90.3	40-140				
Benzo(g,h,i)perylene	1.24	0.545	"	1.36	ND	91.0	40-140				
Benzo(k)fluoranthene	1.26	0.545	"	1.36	ND	92.7	40-140				
Chrysene	1.14	0.545	"	1.36	ND	83.4	40-140				
Dibenzo(a,h)anthracene	1.27	0.545	"	1.36	ND	93.6	40-140				
Fluoranthene	1.19	0.545	"	1.36	ND	87.4	40-140				
Fluorene	1.11	0.545	"	1.36	ND	81.5	40-140				
Indeno(1,2,3-cd)pyrene	1.14	0.545	"	1.36	ND	83.9	40-140				
Naphthalene	1.14	0.545	"	1.36	ND	83.6	40-140				
Phenanthrene	1.11	0.545	"	1.36	ND	81.3	40-140				
Pyrene	1.11	0.545	"	1.36	ND	81.4	40-140				
Surrogate: SURR: Nitrobenzene-d5	1.21		"	1.36		88.8	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	1.25		"	1.36		91.7	30-130				
Surrogate: SURR: Terphenyl-d14	1.21		"	1.36		89.2	30-130				

Matrix Spike Dup (BB40573-MSD1)		*Source sample: 24B0405-26 (DUP)					Prepared: 02/09/2024 Analyzed: 02/12/2024				
2-Methylnaphthalene	1.15	0.545	mg/kg dry	1.36	ND	84.2	40-140	3.27	30		
Acenaphthene	1.03	0.545	"	1.36	ND	75.8	40-140	6.83	30		
Acenaphthylene	0.987	0.545	"	1.36	ND	72.5	40-140	7.23	30		
Anthracene	1.06	0.545	"	1.36	ND	78.0	40-140	0.919	30		
Benzo(a)anthracene	1.16	0.545	"	1.36	ND	85.1	40-140	1.21	30		
Benzo(a)pyrene	1.15	0.545	"	1.36	ND	84.4	40-140	3.63	30		
Benzo(b)fluoranthene	1.18	0.545	"	1.36	ND	86.6	40-140	4.16	30		
Benzo(g,h,i)perylene	1.22	0.545	"	1.36	ND	89.3	40-140	1.95	30		
Benzo(k)fluoranthene	1.22	0.545	"	1.36	ND	89.8	40-140	3.24	30		
Chrysene	1.10	0.545	"	1.36	ND	80.7	40-140	3.31	30		
Dibenzo(a,h)anthracene	1.22	0.545	"	1.36	ND	89.3	40-140	4.72	30		
Fluoranthene	1.19	0.545	"	1.36	ND	87.1	40-140	0.275	30		
Fluorene	1.07	0.545	"	1.36	ND	78.6	40-140	3.60	30		
Indeno(1,2,3-cd)pyrene	1.45	0.545	"	1.36	ND	106	40-140	23.5	30		
Naphthalene	1.10	0.545	"	1.36	ND	80.5	40-140	3.80	30		
Phenanthrene	1.10	0.545	"	1.36	ND	80.9	40-140	0.493	30		
Pyrene	1.09	0.545	"	1.36	ND	79.7	40-140	2.09	30		
Surrogate: SURR: Nitrobenzene-d5	1.20		"	1.36		87.8	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	1.22		"	1.36		89.8	30-130				
Surrogate: SURR: Terphenyl-d14	1.25		"	1.36		91.8	30-130				



Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40566 - EPA 3546 PCB-RCP

Blank (BB40566-BLK2)

Prepared: 02/09/2024 Analyzed: 02/10/2024

Aroclor 1016	ND	0.0250	mg/kg wet								
Aroclor 1221	ND	0.0250	"								
Aroclor 1232	ND	0.0250	"								
Aroclor 1242	ND	0.0250	"								
Aroclor 1248	ND	0.0250	"								
Aroclor 1254	ND	0.0250	"								
Aroclor 1260	ND	0.0250	"								
Aroclor 1262	ND	0.0250	"								
Aroclor 1268	ND	0.0250	"								
Total PCBs	ND	0.0250	"								
Surrogate: Tetrachloro-m-xylene	0.0880		"	0.100		88.0	30-150				
Surrogate: Decachlorobiphenyl	0.0740		"	0.100		74.0	30-150				

LCS (BB40566-BS2)

Prepared: 02/09/2024 Analyzed: 02/10/2024

Aroclor 1016	0.433	0.0249	mg/kg wet	0.498		87.1	40-140				
Aroclor 1260	0.405	0.0249	"	0.498		81.5	40-140				
Surrogate: Tetrachloro-m-xylene	0.0871		"	0.0995		87.5	30-150				
Surrogate: Decachlorobiphenyl	0.0776		"	0.0995		78.0	30-150				

Matrix Spike (BB40566-MS2)

*Source sample: 24B0405-23 (VHB-SB-09 (5-7))

Prepared: 02/09/2024 Analyzed: 02/10/2024

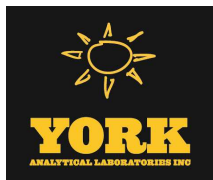
Aroclor 1016	0.611	0.0326	mg/kg dry	0.652	ND	93.6	40-140				
Aroclor 1260	0.613	0.0326	"	0.652	ND	94.0	40-140				
Surrogate: Tetrachloro-m-xylene	0.114		"	0.130		87.5	30-150				
Surrogate: Decachlorobiphenyl	0.116		"	0.130		89.0	30-150				

Matrix Spike Dup (BB40566-MSD2)

*Source sample: 24B0405-23 (VHB-SB-09 (5-7))

Prepared: 02/09/2024 Analyzed: 02/10/2024

Aroclor 1016	0.560	0.0326	mg/kg dry	0.652	ND	85.9	40-140	8.62	50		
Aroclor 1260	0.542	0.0326	"	0.652	ND	83.1	40-140	12.2	50		
Surrogate: Tetrachloro-m-xylene	0.110		"	0.130		84.0	30-150				
Surrogate: Decachlorobiphenyl	0.100		"	0.130		77.0	30-150				



Polychlorinated Biphenyls by GC/ECD - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

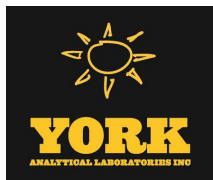
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch S4B0942 - BB40566

Aroclor Reference (S4B0942-ARC1)

Prepared & Analyzed: 02/09/2024

Surrogate: Tetrachloro-m-xylene	0.202		ug/mL	0.200		101					
Surrogate: Decachlorobiphenyl	0.198		"	0.200		99.0					



Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40820 - EPA 3546 ETPH

Blank (BB40820-BLK1)

Prepared & Analyzed: 02/14/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	39.6	mg/kg wet								
Surrogate: 1-Chlorooctadecane	8.33		"	9.90		84.1	50-150				

LCS (BB40820-BS1)

Prepared & Analyzed: 02/14/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	69.2	39.6	mg/kg wet	74.3		93.2	39.8-123				
Surrogate: 1-Chlorooctadecane	8.57		"	9.90		86.5	50-150				

Batch BB40908 - EPA 3546 ETPH

Blank (BB40908-BLK1)

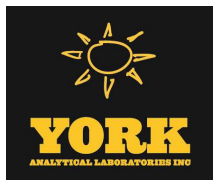
Prepared & Analyzed: 02/15/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	39.6	mg/kg wet								
Surrogate: 1-Chlorooctadecane	11.3		"	9.90		114	50-150				

LCS (BB40908-BS1)

Prepared & Analyzed: 02/15/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	70.4	39.6	mg/kg wet	74.3		94.8	39.8-123				
Surrogate: 1-Chlorooctadecane	8.96		"	9.90		90.5	50-150				



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40607 - EPA 3050B

Blank (BB40607-BLK1)

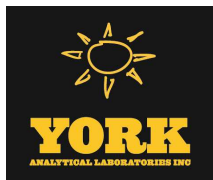
Prepared: 02/09/2024 Analyzed: 02/12/2024

Antimony	ND	1.74	mg/kg wet
Arsenic	ND	1.04	"
Barium	ND	1.73	"
Beryllium	ND	0.035	"
Cadmium	ND	0.208	"
Chromium	ND	0.348	"
Copper	ND	1.39	"
Lead	ND	0.348	"
Nickel	ND	0.692	"
Selenium	ND	1.74	"
Silver	ND	0.350	"
Thallium	ND	1.74	"
Vanadium	ND	0.692	"
Zinc	ND	1.73	"

Reference (BB40607-SRM1)

Prepared: 02/09/2024 Analyzed: 02/12/2024

Antimony	70.7	1.74	mg/kg wet	276	25.6	2.17-110
Arsenic	203	1.04	"	223	90.9	70.4-102.2
Barium	456	1.73	"	445	102	77.9-110.8
Beryllium	126	0.035	"	131	96.3	76.3-107.6
Cadmium	214	0.208	"	226	94.6	88.1-104.9
Chromium	228	0.348	"	230	99.3	73.5-107
Copper	243	1.39	"	239	102	75.3-105.9
Lead	268	0.348	"	275	97.3	74.2-108
Nickel	127	0.692	"	118	108	72-104.2 High Bias
Selenium	96.7	1.74	"	137	70.6	70.9-108.8 Low Bias
Silver	70.9	0.350	"	75.3	94.2	72-110.1
Thallium	133	1.74	"	165	80.7	70.9-106.7
Vanadium	172	0.692	"	183	93.8	67.2-106.6
Zinc	290	1.73	"	286	101	75.9-111.5



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40611 - EPA 3050B

Blank (BB40611-BLK1)

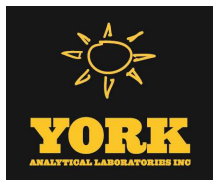
Prepared: 02/09/2024 Analyzed: 02/14/2024

Antimony	ND	1.74	mg/kg wet
Arsenic	ND	1.04	"
Barium	ND	1.73	"
Beryllium	ND	0.035	"
Cadmium	ND	0.208	"
Chromium	ND	0.348	"
Copper	ND	1.39	"
Lead	ND	0.348	"
Nickel	ND	0.692	"
Selenium	ND	1.74	"
Silver	ND	0.350	"
Thallium	ND	1.74	"
Vanadium	ND	0.692	"
Zinc	ND	1.73	"

Reference (BB40611-SRM1)

Prepared: 02/09/2024 Analyzed: 02/14/2024

Antimony	69.2	1.74	mg/kg wet	276	25.1	2.17-110
Arsenic	190	1.04	"	223	85.2	70.4-102.2
Barium	442	1.73	"	445	99.2	77.9-110.8
Beryllium	121	0.035	"	131	92.5	76.3-107.6
Cadmium	203	0.208	"	226	89.9	88.1-104.9
Chromium	215	0.348	"	230	93.4	73.5-107
Copper	243	1.39	"	239	102	75.3-105.9
Lead	261	0.348	"	275	94.8	74.2-108
Nickel	118	0.692	"	118	100	72-104.2
Selenium	94.7	1.74	"	137	69.1	70.9-108.8
Silver	68.2	0.350	"	75.3	90.6	72-110.1
Thallium	160	1.74	"	165	96.7	70.9-106.7
Vanadium	173	0.692	"	183	94.8	67.2-106.6
Zinc	256	1.73	"	286	89.3	75.9-111.5



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BB40868 - EPA 7473 soil

Blank (BB40868-BLK1)

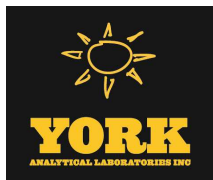
Prepared & Analyzed: 02/14/2024

Mercury	ND	0.0300	mg/kg wet

Reference (BB40868-SRM1)

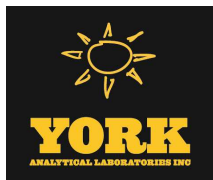
Prepared & Analyzed: 02/14/2024

Mercury	20.590		mg/kg	18.2		113	59.9-140.1



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
24B0405-09	VHB-SB-04 (3-3.5)	40mL Vial with Stir Bar-Cool 4° C
24B0405-11	VHB-SB-05 (1-2)	40mL Vial with Stir Bar-Cool 4° C
24B0405-14	VHB-SB-06 (0.3-2.1)	40mL Vial with Stir Bar-Cool 4° C
24B0405-21	VHB-SB-08 (7-8)	40mL Vial with Stir Bar-Cool 4° C
24B0405-23	VHB-SB-09 (5-7)	40mL Vial with Stir Bar-Cool 4° C
24B0405-26	DUP	40mL Vial with Stir Bar-Cool 4° C
24B0405-27	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



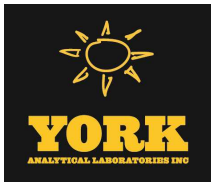
Sample and Data Qualifiers Relating to This Work Order

S-08	The recovery of this surrogate was outside of QC limits.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) was outside the 90-110% recovery criteria.
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.



If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No. 2480405		Page 1 of 3	
120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470		www.yorklab.com 800-306-YORK clientservices@yorklab.com	
YOUR Information		Report To:	
Company: VHB	Company: VHB	Invoice To:	
Address: 100 Great Meadow Road, Suite 200	Address: 100 Great Meadow Road, Suite 200	YOUR Project Number	
Phone: 860 885 7458	Phone: 860-807-4303	43340	
Contact: Neal Hubstein	Contact: Pamela Lind	YOUR Project Name	
E-mail: whulstine@vhb.com	E-mail: plind@vhb.com	Hempstead Park	
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.		YOUR PO#:	
Neal Hubstein Neal Hubstein		Vhb_qp_ct@vhb.com	
Matrix Codes		Report / EDD Type (circle selections)	
S - soil / solid	New York	☒ Summary Report ☒ CT RCP	
GW - groundwater	New Jersey	EQUIS (Standard)	
DW - drinking water	Connecticut	CT RCP DQA/DUE NYSDEC EQUIS	
WW - wastewater	Pennsylvania	NJDEP Reduced NJDKQP	
O - Oil	Other:	Standard Excol EDD Deliverables NJDEP SRP HazSite	
Sample Identification		Analyses Requested	
Samples Collected by: (print AND sign your name)	Date/Time Sampled	Other: EQEDD	
VHB-SB-01 (1.2-1.6)	2/6/24 9:10	PEBs by Soxhlet	
VHB-SB-01 (2.7-3.6)	2/6/24 9:15	PAHs, CT 15 metals	
VHB-SB-02 (2.9-3.9)	2/6/24 9:40	Hold	
VHB-SB-02 (5-7)	2/6/24 9:25	ETPH, PAHs	
VHB-SB-02 (10-12)	2/6/24 9:30	Hold	
VHB-SB-03 (2-2.2)	2/6/24 10:02	Hold	
VHB-SB-03 (5.5-6.7)	2/6/24 10:00	ETPH, PAHs	
VHB-SB-03 (10-11)	2/6/24 10:05	Hold	
VHB-SB-04 (3-3.5)	2/6/24 10:30	PAHs, VOCs	
VHB-SB-04 (5-7)	2/6/24 10:40	Hold	
Comments:		Preservation: (check all that apply)	
		HCl ___ MeOH ___ HNO3 ___ H2SO4 ___ NaOH ___	
		ZnAc ___ Ascorbic Acid ___ Other: ___	
1. Samples Relinquished by / Company		2. Samples Relinquished by / Company	
Neal Hubstein / VHB	Date/Time 2/6/24 17:00	VHB Bridge / VHB	
2. Samples Received by / Company		3. Samples Received by / Company	
Neal Hubstein / VHB	Date/Time 2/7/24 12:05	VHB Bridge / VHB	
4. Samples Relinquished by / Company		5. Samples Received by / Company	
	Date/Time 2/7/24 15:40	VHB Bridge / VHB	
Special Instruction		Date/Time	
Field Filtered		2/7/24 12:05	
Lab to Filter		Date/Time	
Samples Received in LAB by		Date/Time	
[Signature]		2/7/24 15:40	
Temperature		Degrees C	
44		44	



Field Chain-of-Custody Record

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120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK

YORK Project No. 24B0405		Page 2 of 3	
YOUR Information		Report To:	
Company: VHB	Company: VHB	Invoice To:	
Address: 100 Great Meadows Road, Suite 200	Address: 100 Great Meadows Road, Suite 200	YOUR Project Number 43340	
Phone: 860-895-7458	Phone: 860-807-4303	YOUR Project Name Hempstead Park	
Contact: Neal Hulstain	Contact: Pamela Lind	YOUR PO#:	
E-mail: nhulstain@vhb.com	E-mail: plind@vhb.com	Standard (6-9 Day) ☒ Standard (6-9 Day) ☒ PFAS Standard is 7-10 Days	
Matrix Codes		Report / EDD Type (circle selections)	
S - soil / solid	Summary Report	☒ CT RCP	
GW - groundwater	QA Report	☐ CT RCP DQADUE NYSDEC EQUIS	
DW - drinking water	CMDP	☐ NJDEP Reduced NJDKQP	
WW - wastewater	Standard Excel EDD	☐ Deliverables NJDEP SRP HazSite	
O - Oil	Other:	☐ NY ASP B Package Other: E3EDD	
Sample Matrix		Analyses Requested	
S	PAHs, CT 15 metals, VOCs	Container Type No.	
S	CT 15 metals	8oz, 100% 5	
S	Hold	8oz, 100% 5	
S	PAHs, CT 15 metals, VOCs	8oz, 100% 5	
S	CT 15 metals	8oz, 100% 5	
S	Hold	8oz, 100% 1	
S	Hold	8oz, 100% 1	
S	PAHs	8oz, 100% 1	
S	Hold	8oz, 100% 5	
S	Hold	8oz, 100% 5	
Comments:		Special Instruction	
1. Samples Relinquished by / Company Neal Hulstain / VHB Date/Time 2/6/24 17:00		HCl MeOH HNO3 H2SO4 NaOH Field Filtered	
2. Samples Received by / Company Date/Time 2/7/24 12:05		Lab to Filter	
3. Samples Relinquished by / Company Date/Time 2/7/24 15:40		Date/Time 2/7/24 12:05	
4. Samples Relinquished by / Company Date/Time 2/7/24 15:40		Date/Time 2/7/24 15:40	
Temperature 4.4 Degrees C			



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK

YORK Project No. <u>24B0405</u>		Page <u>3</u> of <u>3</u>	
YOUR INFORMATION		Report To:	
Company: <u>VHB</u>	Company: <u>VHB</u>	Invoice To:	
Address: <u>100 Great Meadow Road, Suite 200</u>	Address: <u>100 Great Meadow Road, Suite 200</u>	Company: <u>VHB</u>	
Phone: <u>860-895-7458</u>	Phone: <u>860-807-4303</u>	Address: <u>100 Great Meadow Road, Suite 200</u>	
Contact: <u>Neal Hulstcin</u>	Contact: <u>Paula Lind</u>	Phone: _____	
E-mail: <u>nhulstcin@vhb.com</u>	E-mail: <u>plind@vhb.com</u>	Contact: _____	
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.		E-mail: _____	

Report / EDD Type (circle selections)		Report / EDD Type (circle selections)	
Matrix Codes		Summary Report	
S - soil / solid	New York	CT RCP	
GW - groundwater	New Jersey	CT RCP DQADUE NYSDEC EQUIS	
DW - drinking water	Connecticut	NJDEP Reduced NJDKQP	
WW - wastewater	Pennsylvania	Standard Excel EDD Deliverables NJDEP SRP HazSite	
O - Oil	Other:	NY ASP B Package Other: <u>EQEDD</u>	

Samples Collected by: (print AND sign your name)		Analyses Requested		Container Type	No.
Sample Identification		Date/Time Sampled			
VHB-SB-08 (7-8)		2/6/24/13:40		VOCs	4
VHB-SB-09 (1-2.5)		2/6/24/14:05		8oz VOCs	5
VHB-SB-09 (5-7)		2/6/24/14:10		8oz VOCs	5
VHB-SB-10 (1-1.7)		2/6/24/14:20		8oz VOCs	5
VHB-SB-10 (5-6)		2/6/24/14:30		8oz VOCs	5
DUP		2/6/24/—		8oz VOCs	5
Trip Blank		2/6/24/—		VOCs	2

Comments:		Preservation: (check all that apply)	
		HCl _____ MeOH _____ HNO3 _____ H2SO4 _____ NaOH _____	
		ZnAc _____ Ascorbic Acid _____ Other: _____	
Samples iced/chilled at time of lab pickup? circle Yes or No		Date/Time	
1. Samples Relinquished by / Company		2. Samples Relinquished by / Company	
Neal Hulstcin / VHB		VHB Forge / VHB	
Date/Time		Date/Time	
2/6/24/17:00		2/7/24/12:05	
3. Samples Relinquished by / Company		3. Samples Received by / Company	
2/7/24 12:05		2/7/24 15:40	
4. Samples Relinquished by / Company		4. Samples Received in LAB by	
2/7/24 12:05		2/7/24 15:40	
		Temperature	
		46.4 Degrees C	



Monday, February 12, 2024

Attn: Ms.Cassie Mosher
York Analytical Laboratories
120 Research Drive
Stratford, CT 06615

Project ID: 24B0405
SDG ID: GCQ03150
Sample ID#s: CQ03150

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

February 12, 2024

SDG I.D.: GCQ03150

Project ID: 24B0405

Client Id	Lab Id	Matrix
24B0405-01	CQ03150	SOIL



Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report

February 12, 2024

FOR: Attn: Ms.Cassie Mosher
York Analytical Laboratories
120 Research Drive
Stratford, CT 06615

Sample Information

Matrix: SOIL
Location Code: YORK-PCB
Rush Request: 5 Day
P.O.#: 24B0405

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

02/06/24 9:10
02/08/24 9:15

Time

Laboratory Data

SDG ID: GCQ03150
Phoenix ID: CQ03150

Project ID: 24B0405
Client ID: 24B0405-01

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Percent Solid	81		%		02/08/24	CV	SW846-%Solid
Extraction for PCB	Completed				02/08/24	R/J/AC1	SW3540C

PCB (Soxhlet SW3540C)

PCB-1016	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1221	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1232	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1242	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1248	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1254	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1260	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1262	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A
PCB-1268	ND	0.4	mg/Kg	10	02/09/24	AW	SW8082A

QA/QC Surrogates

% DCBP	88		%	10	02/09/24	AW	30 - 150 %
% DCBP (Confirmation)	77		%	10	02/09/24	AW	30 - 150 %
% TCMX	70		%	10	02/09/24	AW	30 - 150 %
% TCMX (Confirmation)	61		%	10	02/09/24	AW	30 - 150 %

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.
If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.
The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

February 12, 2024

Reviewed and Released by: Ethan Lee, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102

QA/QC Report

February 12, 2024

QA/QC Data

SDG I.D.: GCQ03150

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 717582 (mg/Kg), QC Sample No: CQ01147 10X (CQ03150)										
<u>Polychlorinated Biphenyls - Soil</u>										
PCB-1016	ND	0.17	109	109	0.0	88	92	4.4	40 - 140	30
PCB-1221	ND	0.17							40 - 140	30
PCB-1232	ND	0.17							40 - 140	30
PCB-1242	ND	0.17							40 - 140	30
PCB-1248	ND	0.17							40 - 140	30
PCB-1254	ND	0.17							40 - 140	30
PCB-1260	ND	0.17	114	120	5.1	93	99	6.3	40 - 140	30
PCB-1262	ND	0.17							40 - 140	30
PCB-1268	ND	0.17							40 - 140	30
% DCBP (Surrogate Rec)	111	%	121	123	1.6	97	100	3.0	30 - 150	30
% DCBP (Surrogate Rec) (Confirm)	119	%	121	122	0.8	98	101	3.0	30 - 150	30
% TCMX (Surrogate Rec)	94	%	103	99	4.0	82	86	4.8	30 - 150	30
% TCMX (Surrogate Rec) (Confirm)	95	%	106	102	3.8	85	88	3.5	30 - 150	30

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference


Phyllis Shiller, Laboratory Director
February 12, 2024

Criteria: None
State: CT

Sample Criteria Exceedances Report
GCQ03150 - YORK-PCB

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Phoenix Environmental Labs, Inc.

Client: York Analytical Laboratories

Project Location: 24B0405

Project Number:

Laboratory Sample ID(s): CQ03150

Sampling Date(s): 2/6/2024

List RCP Methods Used (e.g., 8260, 8270, et cetera) 8082

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	☒ Yes ☐ No
1A	Were the method specified preservation and holding time requirements met?	☒ Yes ☐ No
1B	<u>VPH and EPH methods only:</u> Was the VPH or EPH method conducted without significant modifications (see section 11.3 of respective RCP methods)	☐ Yes ☐ No ☒ NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated Chain-of-Custody document(s)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (< 6 Degrees C)?	☒ Yes ☐ No ☐ NA
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	☒ Yes ☐ No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	☐ Yes ☒ No ☒ Yes ☐ No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☒ Yes ☐ No
7	Are project-specific matrix spikes and laboratory duplicates included in the data set?	☐ Yes ☒ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or 1B is "No", the data package does not meet the requirements for "Reasonable Confidence". This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Ethan Lee **Position:** Project Manager

Printed Name: Ethan Lee **Date:** Monday, February 12, 2024

Name of Laboratory Phoenix Environmental Labs, Inc.

This certification form is to be used for RCP methods only.

CTDEP RCP Laboratory Analysis QA/QC Certification Form - November 2007
Laboratory Quality Assurance and Quality Control Guidance Reasonable Confidence Protocols



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



RCP Certification Report

February 12, 2024

SDG I.D.: GCQ03150

PCB Narration

Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved? Yes.

Instrument:

AU-ECD24 02/09/24-1

Saadia Chudary, Chemist 02/09/24

CQ03150 (10X)

The initial calibration (PC1208AI) RSD for the compound list was less than 20% except for the following compounds: None.

The initial calibration (PC1208BI) RSD for the compound list was less than 20% except for the following compounds: None.

The continuing calibration %D for the compound list was less than 15% except for the following compounds: None.

QC (Batch Specific):

Batch 717582 (CQ01147)

CQ03150

All LCS recoveries were within 40 - 140 with the following exceptions: None.

All LCSD recoveries were within 40 - 140 with the following exceptions: None.

All LCS/LCSD RPDs were less than 30% with the following exceptions: None.

Temperature Narration

The samples were received at 2.3C with cooling initiated.

(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

YORK

Analytical Laboratories, Inc.

2.3^{owc}
1P

2/7/2024

SUBCONTRACT Notification, Purchase Order and Chain-of-Custody

York Project No.: 24B0405

This information is being sent to inform you that York intends to subcontract certain samples to another licensed laboratory for specific parameters that we cannot perform in-house. The specific parameters that will be subcontracted are detailed below. Do not contact the subcontract laboratory directly. Please contact the YORK project manager for further information.

Note: E-mail lab reports to: York_Lab_Report@yorklab.com Mail/Fax Hard Copies to: York Analytical at the address below

SENDING LABORATORY:

RECEIVING LABORATORY:

York Analytical Laboratories, Inc. - Stratford
120 Research Drive
Stratford, CT 06615
Phone: 203.325.1371
Fax: 203.357.0166
Contact: York Analytical

Phoenix Environmental Laboratories, Inc. S
587 East Middle Turnpike P.O. Box 370
Manchester, CT 06045
Phone: (860) 645-1102
Fax: (860) 645-0823

York Ref: 24B0405-01

Sample ID: VHB-SB-01 (1.2-1.6) 03150

Matrix: Soil

Date Sampled: 02/06/2024 09:10

Analysis Needed

Date Due

Holding Time Expires

Comments

Total Solids 02/15/2024 19:00

03/05/2024 09:10

Polychlorinated Biphenyls- Soxhle 02/15/2024 19:00

02/20/2024 09:10

Containers Supplied:

06_4 oz. WM Clear Glass Cool to 4° C (A)

York Purchase Order No.: 24B0405

Samples from State of: CT

Deliverables required: CT RCP Deliverables

Data Pkg DUE:

EDDs required:

Special Info:

Reporting level: MDL/LOD

Chain-of-Custody Information

Rachel A Driesen

2/7/2024

Chris Catania 2-8-24 6:00 AM

Released By York Sample Control

Date

Received By

Date

Chris Catania 2-8-24

Atrium

[Signature]

2/8/24 9:15

Received By

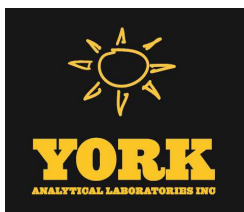
Date

Received in Subcontract Lab By

Date

Rel

Page 1 of 1



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 08/08/2024

Client Project ID: 43340 - Hempstead Park

York Project (SDG) No.: 24G0112

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371

132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 08/08/2024
Client Project ID: 43340 - Hempstead Park
York Project (SDG) No.: 24G0112

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 02, 2024 and listed below. The project was identified as your project: **43340 - Hempstead Park**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24G0112-01	VHB-SB-13 (2.2-2.8ft)	Soil	07/01/2024	07/02/2024
24G0112-04	VHB-SB-14 (1-1.8ft)	Soil	07/01/2024	07/02/2024
24G0112-07	VHB-SB-15 (0-1ft)	Soil	07/01/2024	07/02/2024
24G0112-08	VHB-SB-16 (2-2.9ft)	Soil	07/01/2024	07/02/2024
24G0112-09	VHB-SB-16 (6-7.9ft)	Soil	07/01/2024	07/02/2024
24G0112-11	VHB-SB-17 (0-1.4ft)	Soil	07/01/2024	07/02/2024
24G0112-14	VHB-SB-18 (1-1.8ft)	Soil	07/01/2024	07/02/2024
24G0112-26	DUP-07012024	Soil	07/01/2024	07/02/2024
24G0112-27	Field Blank_07012024	Water	07/01/2024	07/02/2024

General Notes for York Project (SDG) No.: 24G0112

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Cassie L Mosher
Laboratory Manager

Date: 08/08/2024





Sample Information

Client Sample ID: VHB-SB-13 (2.2-2.8ft)

York Sample ID: 24G0112-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Soil

July 1, 2024 9:40 am

07/02/2024

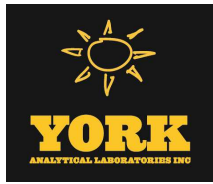
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.198	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.205	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		ug/kg dry	0.208	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
72629-94-8	Perfluorotridecanoic acid (PFTriDA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.448	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.216	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.851	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.860	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.896	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ug/kg dry	0.399	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.448	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.448	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.448	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.211	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.840	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.896	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.847	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.838	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
919005-14-4	ADONA	ND		ug/kg dry	0.847	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM



Sample Information

Client Sample ID: VHB-SB-13 (2.2-2.8ft)

York Sample ID: 24G0112-01

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 9:40 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

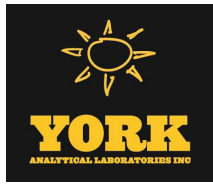
CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.217	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.215	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPPrPA)	ND		ug/kg dry	1.12	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	5.60	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	5.60	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.24	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.24	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/10/2024 23:48	AM

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	91.6 %
Surrogate: M5PFHxA	95.7 %
Surrogate: M4PFHpA	95.9 %
Surrogate: M3PFHxS	93.4 %
Surrogate: Perfluoro-n-[13C8]octanoic acid	93.0 %
Surrogate: M6PFDA	82.2 %
Surrogate: M7PFUdA	96.3 %
Surrogate: Perfluoro-n-[1,2-13C2]dodecano	83.2 %
Surrogate: M2PFTeDA	65.0 %
Surrogate: Perfluoro-n-[13C4]butanoic acid	102 %
Surrogate: Perfluoro-1-[13C8]octanesulfoni	98.6 %
Surrogate: Perfluoro-n-[13C5]pentanoic aci	88.1 %
Surrogate: Perfluoro-1-[13C8]octanesulfon	102 %
Surrogate: d3-N-MeFOSAA	99.0 %
Surrogate: d5-N-EtFOSAA	117 %
Surrogate: M2-6:2 FTS	71.0 %
Surrogate: M2-8:2 FTS	78.1 %
Surrogate: M9PFNA	96.5 %
Surrogate: M2-4:2 FTS	78.4 %
Surrogate: d-N-MeFOSA	75.6 %
Surrogate: d-N-EtFOSA	57.2 %
Surrogate: M3HFPO-DA	93.9 %
Surrogate: d9-N-EtFOSE	52.4 %
Surrogate: d7-N-MeFOSE	73.9 %



Sample Information

Client Sample ID: VHB-SB-13 (2.2-2.8ft)

York Sample ID: 24G0112-01

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 9:40 am

Date Received

07/02/2024

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	88.7		%	0.100	1	SM 2540G	07/11/2024 14:21	07/11/2024 14:21	BMC

Sample Information

Client Sample ID: VHB-SB-14 (1-1.8ft)

York Sample ID: 24G0112-04

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 10:25 am

Date Received

07/02/2024

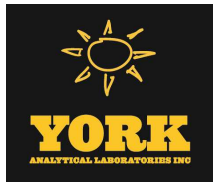
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.201	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.158	J	ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.352		ug/kg dry	0.208	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	4.18		ug/kg dry	0.211	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
72629-94-8	Perfluorotridecanoic acid (PFTriDA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.455	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.219	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.864	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.873	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.909	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM



Sample Information

Client Sample ID: VHB-SB-14 (1-1.8ft)

York Sample ID: 24G0112-04

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 10:25 am

Date Received

07/02/2024

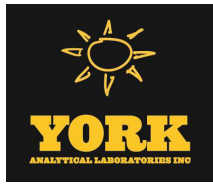
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ug/kg dry	0.405	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.455	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.455	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.455	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.214	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.852	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.909	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.859	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.850	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
919005-14-4	ADONA	ND		ug/kg dry	0.859	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.220	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.218	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.14	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	5.68	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	5.68	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.27	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.27	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:05	AM
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		88.5 %	25-150							
Surrogate: M5PFHxA		72.4 %	25-150							
Surrogate: M4PFHpA		84.3 %	25-150							
Surrogate: M3PFHxS		90.6 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		76.0 %	25-150							
Surrogate: M6PFDA		90.0 %	25-150							
Surrogate: M7PFUdA		86.6 %	25-150							
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		82.2 %	25-150							
Surrogate: M2PFTeDA		56.4 %	10-150							
Surrogate: Perfluoro-n-[13C4]butanoic acid		83.0 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfoni		90.1 %	25-150							
Surrogate: Perfluoro-n-[13C5]pentanoic aci		68.3 %	25-150							



Sample Information

Client Sample ID: VHB-SB-14 (1-1.8ft)

York Sample ID: 24G0112-04

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 10:25 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid	72.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	93.8 %			25-150					
	Surrogate: d5-N-EtFOSAA	92.6 %			25-150					
	Surrogate: M2-6:2 FTS	81.7 %			25-200					
	Surrogate: M2-8:2 FTS	83.8 %			25-200					
	Surrogate: M9PFNA	83.9 %			25-150					
	Surrogate: M2-4:2 FTS	78.8 %			25-150					
	Surrogate: d-N-MeFOSA	56.9 %			25-150					
	Surrogate: d-N-EtFOSA	49.3 %			25-150					
	Surrogate: M3HFPO-DA	72.7 %			25-150					
	Surrogate: d9-N-EtFOSE	43.0 %			25-150					
	Surrogate: d7-N-MeFOSE	49.8 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	87.1		%	0.100	1	SM 2540G	07/11/2024 14:21	07/11/2024 14:21	BMC

Sample Information

Client Sample ID: VHB-SB-15 (0-1ft)

York Sample ID: 24G0112-07

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:00 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.207	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.314		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.615		ug/kg dry	0.214	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	7.07		ug/kg dry	0.217	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM

120 RESEARCH DRIVE

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STRATFORD, CT 06615

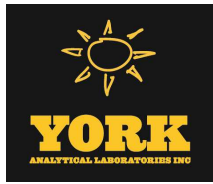
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-15 (0-1ft)

York Sample ID: 24G0112-07

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:00 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.231	J	ug/kg dry	0.467	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.225	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.887	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.896	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	0.267	J	ug/kg dry	0.934	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		ug/kg dry	0.415	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.467	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.467	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.467	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.219	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.875	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.934	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.882	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.873	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
919005-14-4	ADONA	ND		ug/kg dry	0.882	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.226	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.17	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	5.83	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	5.83	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.33	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM



Sample Information

Client Sample ID: VHB-SB-15 (0-1ft)

York Sample ID: 24G0112-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Soil

July 1, 2024 11:00 am

07/02/2024

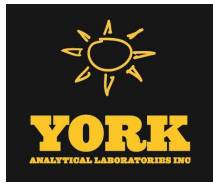
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.33	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.233	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:21	AM
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		92.0 %	25-150							
Surrogate: M5PFHxA		84.5 %	25-150							
Surrogate: M4PFHpA		85.6 %	25-150							
Surrogate: M3PFHxS		95.5 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		82.1 %	25-150							
Surrogate: M6PFDA		87.3 %	25-150							
Surrogate: M7PFUdA		81.1 %	25-150							
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		76.5 %	25-150							
Surrogate: M2PFTeDA		61.9 %	10-150							
Surrogate: Perfluoro-n-[13C4]butanoic acid		91.7 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfoni		96.9 %	25-150							
Surrogate: Perfluoro-n-[13C5]pentanoic aci		80.8 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfoni		82.8 %	10-150							
Surrogate: d3-N-MeFOSAA		98.3 %	25-150							
Surrogate: d5-N-EtFOSAA		106 %	25-150							
Surrogate: M2-6:2 FTS		106 %	25-200							
Surrogate: M2-8:2 FTS		102 %	25-200							
Surrogate: M9PFNA		79.8 %	25-150							
Surrogate: M2-4:2 FTS		103 %	25-150							
Surrogate: d-N-MeFOSA		65.1 %	25-150							
Surrogate: d-N-EtFOSA		47.6 %	25-150							
Surrogate: M3HFPO-DA		84.5 %	25-150							
Surrogate: d9-N-EtFOSE		47.1 %	25-150							
Surrogate: d7-N-MeFOSE		64.3 %	25-150							



Sample Information

Client Sample ID: VHB-SB-15 (0-1ft)

York Sample ID: 24G0112-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Soil

July 1, 2024 11:00 am

07/02/2024

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	84.5		%	0.100	1	SM 2540G	07/11/2024 14:21	07/11/2024 14:21	BMC

Sample Information

Client Sample ID: VHB-SB-16 (2-2.9ft)

York Sample ID: 24G0112-08

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Soil

July 1, 2024 11:10 am

07/02/2024

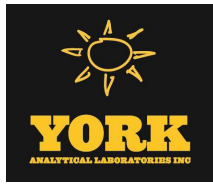
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.223	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.190	J	ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.43		ug/kg dry	0.231	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
335-67-1	Perfluorooctanoic acid (PFOA)	0.353		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	32.8		ug/kg dry	0.235	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
72629-94-8	Perfluorotridecanoic acid (PFTriDA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.504	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	0.461		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.243	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.958	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.968	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	1.01	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM



Sample Information

Client Sample ID: VHB-SB-16 (2-2.9ft)

York Sample ID: 24G0112-08

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:10 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

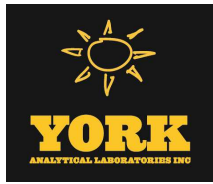
CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ug/kg dry	0.449	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.504	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.504	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.504	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	0.356		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.946	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	1.01	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.953	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.943	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
919005-14-4	ADONA	ND		ug/kg dry	0.953	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.242	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.26	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	6.30	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	6.30	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.52	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.52	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.252	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:37	AM

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	88.2 %
Surrogate: M5PFHxA	84.6 %
Surrogate: M4PFHpA	83.2 %
Surrogate: M3PFHxS	91.0 %
Surrogate: Perfluoro-n-[13C8]octanoic acid	80.4 %
Surrogate: M6PFDA	82.2 %
Surrogate: M7PFUdA	79.5 %
Surrogate: Perfluoro-n-[1,2-13C2]dodecano	79.8 %
Surrogate: M2PFTeDA	60.2 %
Surrogate: Perfluoro-n-[13C4]butanoic acid	87.7 %
Surrogate: Perfluoro-1-[13C8]octanesulfoni	93.2 %



Sample Information

Client Sample ID: VHB-SB-16 (2-2.9ft)

York Sample ID: 24G0112-08

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:10 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C5]pentanoic aci	80.1 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonic	81.5 %			10-150					
	Surrogate: d3-N-MeFOSAA	102 %			25-150					
	Surrogate: d5-N-EtFOSAA	110 %			25-150					
	Surrogate: M2-6:2 FTS	84.7 %			25-200					
	Surrogate: M2-8:2 FTS	101 %			25-200					
	Surrogate: M9PFNA	80.8 %			25-150					
	Surrogate: M2-4:2 FTS	77.5 %			25-150					
	Surrogate: d-N-MeFOSA	63.8 %			25-150					
	Surrogate: d-N-EtFOSA	49.1 %			25-150					
	Surrogate: M3HFPO-DA	84.1 %			25-150					
	Surrogate: d9-N-EtFOSE	41.2 %			25-150					
	Surrogate: d7-N-MeFOSE	60.6 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	78.5		%	0.100	1	SM 2540G	07/11/2024 14:21	07/11/2024 14:21	BMC

Sample Information

Client Sample ID: VHB-SB-16 (6-7.9ft)

York Sample ID: 24G0112-09

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:15 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.27		ug/kg dry	0.231	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	16.3		ug/kg dry	0.235	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM

120 RESEARCH DRIVE

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ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-SB-16 (6-7.9ft)

York Sample ID: 24G0112-09

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
July 1, 2024 11:15 am

Date Received
07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.506	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.244	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.961	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.971	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	1.01	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ug/kg dry	0.450	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.506	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.506	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.506	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.238	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.948	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	1.01	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.956	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.946	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
919005-14-4	ADONA	ND		ug/kg dry	0.956	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.243	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.26	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	6.32	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	6.32	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.53	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM



Sample Information

Client Sample ID: VHB-SB-16 (6-7.9ft)

York Sample ID: 24G0112-09

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
July 1, 2024 11:15 am

Date Received
07/02/2024

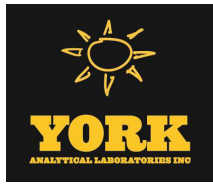
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.53	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.253	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 21:59	AM
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		119 %	25-150							
Surrogate: M5PFHxA		109 %	25-150							
Surrogate: M4PFHpA		114 %	25-150							
Surrogate: M3PFHxS		117 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		124 %	25-150							
Surrogate: M6PFDA		117 %	25-150							
Surrogate: M7PFUdA		141 %	25-150							
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid		144 %	25-150							
Surrogate: M2PFTeDA		138 %	10-150							
Surrogate: Perfluoro-n-[13C4]butanoic acid		31.7 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid		115 %	25-150							
Surrogate: Perfluoro-n-[13C5]pentanoic acid		117 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid		75.5 %	10-150							
Surrogate: d3-N-MeFOSAA		79.3 %	25-150							
Surrogate: d5-N-EtFOSAA		91.8 %	25-150							
Surrogate: M2-6:2 FTS		51.8 %	25-200							
Surrogate: M2-8:2 FTS		62.6 %	25-200							
Surrogate: M9PFNA		110 %	25-150							
Surrogate: M2-4:2 FTS		62.7 %	25-150							
Surrogate: d-N-MeFOSA		60.6 %	25-150							
Surrogate: d-N-EtFOSA		49.1 %	25-150							
Surrogate: M3HFPO-DA		121 %	25-150							
Surrogate: d9-N-EtFOSE		138 %	25-150							
Surrogate: d7-N-MeFOSE		135 %	25-150							



Sample Information

Client Sample ID: VHB-SB-16 (6-7.9ft)

York Sample ID: 24G0112-09

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:15 am

Date Received

07/02/2024

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	77.9		%	0.100	1	SM 2540G	07/25/2024 14:20	07/25/2024 14:22	AC

Sample Information

Client Sample ID: VHB-SB-17 (0-1.4ft)

York Sample ID: 24G0112-11

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:30 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.196	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.144	J	ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ug/kg dry	0.203	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.589		ug/kg dry	0.206	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.136	J	ug/kg dry	0.444	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.214	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.843	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.852	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.887	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM



Sample Information

Client Sample ID: VHB-SB-17 (0-1.4ft)

York Sample ID: 24G0112-11

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
July 1, 2024 11:30 am

Date Received
07/02/2024

PFAS, EPA 1633 Target List

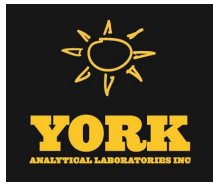
Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ug/kg dry	0.395	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.444	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.444	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.444	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.208	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.832	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.887	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.838	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.830	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
919005-14-4	ADONA	ND		ug/kg dry	0.838	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.215	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.213	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.11	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	5.54	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	5.54	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.22	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.22	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:16	AM

Surrogate Recoveries	Result	Acceptance Range
Surrogate: M3PFBS	125 %	25-150
Surrogate: M5PFHxA	114 %	25-150
Surrogate: M4PFHpA	114 %	25-150
Surrogate: M3PFHxS	122 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid	114 %	25-150
Surrogate: M6PFDA	112 %	25-150
Surrogate: M7PFUDA	157 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecano	156 %	25-150
Surrogate: M2PFTeDA	124 %	10-150
Surrogate: Perfluoro-n-[13C4]butanoic acid	107 %	25-150
Surrogate: Perfluoro-1-[13C8]octanesulfoni	126 %	25-150
Surrogate: Perfluoro-n-[13C5]pentanoic aci	120 %	25-150



Sample Information

Client Sample ID: VHB-SB-17 (0-1.4ft)

York Sample ID: 24G0112-11

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:30 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-1-[13C8]octanesulfonic acid	77.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	77.8 %			25-150					
	Surrogate: d5-N-EtFOSAA	109 %			25-150					
	Surrogate: M2-6:2 FTS	48.7 %			25-200					
	Surrogate: M2-8:2 FTS	62.1 %			25-200					
	Surrogate: M9PFNA	132 %			25-150					
	Surrogate: M2-4:2 FTS	58.7 %			25-150					
	Surrogate: d-N-MeFOSA	66.4 %			25-150					
	Surrogate: d-N-EtFOSA	51.7 %			25-150					
	Surrogate: M3HFPO-DA	125 %			25-150					
	Surrogate: d9-N-EtFOSE	121 %			25-150					
	Surrogate: d7-N-MeFOSE	131 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	89.6		%	0.100	1	SM 2540G	07/25/2024 14:20	07/25/2024 14:22	AC

Sample Information

Client Sample ID: VHB-SB-18 (1-1.8ft)

York Sample ID: 24G0112-14

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:50 am

Date Received

07/02/2024

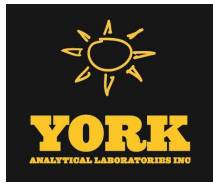
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ug/kg dry	0.209	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.0793	J	ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.315		ug/kg dry	0.217	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.83		ug/kg dry	0.220	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM



Sample Information

Client Sample ID: VHB-SB-18 (1-1.8ft)

York Sample ID: 24G0112-14

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:50 am

Date Received

07/02/2024

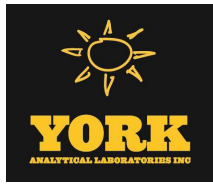
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.473	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.228	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.899	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.909	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.947	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ug/kg dry	0.421	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ug/kg dry	0.473	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.473	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.473	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ug/kg dry	0.222	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.888	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.947	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.895	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.885	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
919005-14-4	ADONA	ND		ug/kg dry	0.895	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.230	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.18	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	5.92	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	5.92	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.37	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM



Sample Information

Client Sample ID: VHB-SB-18 (1-1.8ft)

York Sample ID: 24G0112-14

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 11:50 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.37	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/24/2024 15:59	07/29/2024 22:32	AM
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		131 %	25-150							
Surrogate: M5PFHxA		116 %	25-150							
Surrogate: M4PFHpA		120 %	25-150							
Surrogate: M3PFHxS		130 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		139 %	25-150							
Surrogate: M6PFDA		107 %	25-150							
Surrogate: M7PFUdA		139 %	25-150							
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		113 %	25-150							
Surrogate: M2PFTeDA		114 %	10-150							
Surrogate: Perfluoro-n-[13C4]butanoic acid		73.9 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfoni		120 %	25-150							
Surrogate: Perfluoro-n-[13C5]pentanoic aci		127 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfon		90.0 %	10-150							
Surrogate: d3-N-MeFOSAA		78.8 %	25-150							
Surrogate: d5-N-EtFOSAA		109 %	25-150							
Surrogate: M2-6:2 FTS		59.2 %	25-200							
Surrogate: M2-8:2 FTS		70.8 %	25-200							
Surrogate: M9PFNA		107 %	25-150							
Surrogate: M2-4:2 FTS		68.9 %	25-150							
Surrogate: d-N-MeFOSA		62.5 %	25-150							
Surrogate: d-N-EtFOSA		52.8 %	25-150							
Surrogate: M3HFPO-DA		142 %	25-150							
Surrogate: d9-N-EtFOSE		92.3 %	25-150							
Surrogate: d7-N-MeFOSE		110 %	25-150							



Sample Information

Client Sample ID: VHB-SB-18 (1-1.8ft)

York Sample ID: 24G0112-14

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
July 1, 2024 11:50 am

Date Received
07/02/2024

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	83.8		%	0.100	1	SM 2540G	07/25/2024 14:20	07/25/2024 14:22	AC

Sample Information

Client Sample ID: DUP-07012024

York Sample ID: 24G0112-26

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Soil

Collection Date/Time
July 1, 2024 12:01 am

Date Received
07/02/2024

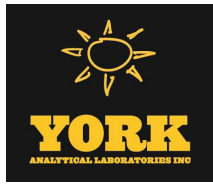
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.145	J	ug/kg dry	0.216	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	0.186	J	ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	5.10		ug/kg dry	0.224	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
335-67-1	Perfluorooctanoic acid (PFOA)	0.419		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	32.7		ug/kg dry	0.227	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
2355-31-9	N-MeFOSAA	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
2991-50-6	N-EtFOSAA	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ug/kg dry	0.489	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	0.490		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ug/kg dry	0.236	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ug/kg dry	0.930	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ug/kg dry	0.939	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ug/kg dry	0.978	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM



Sample Information

Client Sample ID: DUP-07012024

York Sample ID: 24G0112-26

York Project (SDG) No.

24G0112

Client Project ID

43340 - Hempstead Park

Matrix

Soil

Collection Date/Time

July 1, 2024 12:01 am

Date Received

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

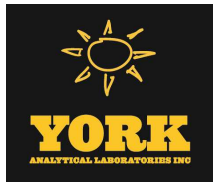
CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ug/kg dry	0.435	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ug/kg dry	0.489	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ug/kg dry	0.489	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ug/kg dry	0.489	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	0.379		ug/kg dry	0.230	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ug/kg dry	0.917	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ug/kg dry	0.978	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
763051-92-9	11CL-PF3OUdS	ND		ug/kg dry	0.925	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
756426-58-1	9CL-PF3ONS	ND		ug/kg dry	0.915	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
919005-14-4	ADONA	ND		ug/kg dry	0.925	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ug/kg dry	0.237	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ug/kg dry	0.235	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ug/kg dry	1.22	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ug/kg dry	6.12	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ug/kg dry	6.12	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
24448-09-7	N-MeFOSE	ND		ug/kg dry	2.45	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
31506-32-8	N-MeFOSA	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
1691-99-2	N-EtFOSE	ND		ug/kg dry	2.45	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM
4151-50-2	N-EtFOSA	ND		ug/kg dry	0.245	1	EPA 1633 Draft 3	07/09/2024 08:08	07/11/2024 00:53	AM

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	90.0 %
Surrogate: M5PFHxA	84.2 %
Surrogate: M4PFHpA	78.8 %
Surrogate: M3PFHxS	90.0 %
Surrogate: Perfluoro-n-[13C8]octanoic acid	79.1 %
Surrogate: M6PFDA	94.2 %
Surrogate: M7PFUdA	80.0 %
Surrogate: Perfluoro-n-[1,2-13C2]dodecano	68.2 %
Surrogate: M2PFTeDA	58.1 %
Surrogate: Perfluoro-n-[13C4]butanoic acid	87.9 %
Surrogate: Perfluoro-1-[13C8]octanesulfoni	87.1 %



Sample Information

Client Sample ID: DUP-07012024

York Sample ID: 24G0112-26

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Soil

July 1, 2024 12:01 am

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C5]pentanoic aci	78.6 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfon	79.7 %			10-150					
	Surrogate: d3-N-MeFOSAA	90.9 %			25-150					
	Surrogate: d5-N-EtFOSAA	105 %			25-150					
	Surrogate: M2-6:2 FTS	92.7 %			25-200					
	Surrogate: M2-8:2 FTS	93.2 %			25-200					
	Surrogate: M9PFNA	74.3 %			25-150					
	Surrogate: M2-4:2 FTS	78.8 %			25-150					
	Surrogate: d-N-MeFOSA	62.5 %			25-150					
	Surrogate: d-N-EtFOSA	45.9 %			25-150					
	Surrogate: M3HFPO-DA	83.1 %			25-150					
	Surrogate: d9-N-EtFOSE	43.4 %			25-150					
	Surrogate: d7-N-MeFOSE	58.2 %			25-150					

Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	% Solids	80.8		%	0.100	1	SM 2540G	07/11/2024 14:21	07/11/2024 14:21	BMC

Sample Information

Client Sample ID: Field Blank_07012024

York Sample ID: 24G0112-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Water

July 1, 2024 8:55 am

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		ng/L	1.71	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		ng/L	1.77	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		ng/L	1.80	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM



Sample Information

Client Sample ID: Field Blank_07012024

York Sample ID: 24G0112-27

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0112

43340 - Hempstead Park

Water

July 1, 2024 8:55 am

07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
2355-31-9	N-MeFOSAA	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
2991-50-6	N-EtFOSAA	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		ng/L	3.86	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.84	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.86	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.34	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.41	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	ND		ng/L	7.72	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.44	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.86	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.86	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.86	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.24	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.72	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.30	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	7.22	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
919005-14-4	ADONA	ND		ng/L	7.30	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.85	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.83	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	24.1	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	24.1	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
24448-09-7	N-MeFOSE	ND		ng/L	19.3	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM



Sample Information

Client Sample ID: Field Blank_07012024

York Sample ID: 24G0112-27

York Project (SDG) No.
24G0112

Client Project ID
43340 - Hempstead Park

Matrix
Water

Collection Date/Time
July 1, 2024 8:55 am

Date Received
07/02/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
31506-32-8	N-MeFOSA	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
1691-99-2	N-EtFOSE	ND		ng/L	19.3	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
4151-50-2	N-EtFOSA	ND		ng/L	1.93	1	EPA 1633 Draft 3	07/11/2024 16:18	07/12/2024 23:14	AM
Surrogate Recoveries		Result		Acceptance Range						
Surrogate: M3PFBS		122 %		25-150						
Surrogate: M5PFHxA		126 %		25-150						
Surrogate: M4PFHpA		157 %	PFSu-H	25-150						
Surrogate: M3PFHxS		126 %		25-150						
Surrogate: Perfluoro-n-[13C8]octanoic acid		128 %		25-150						
Surrogate: M6PFDA		124 %		25-150						
Surrogate: M7PFUdA		138 %		25-150						
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		96.2 %		25-150						
Surrogate: M2PFTeDA		75.8 %		10-150						
Surrogate: Perfluoro-n-[13C4]butanoic acid		3.84 %	PFSu-L	25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfoni		122 %		25-150						
Surrogate: Perfluoro-n-[13C5]pentanoic aci		84.7 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfon		125 %		10-150						
Surrogate: d3-N-MeFOSAA		130 %		25-150						
Surrogate: d5-N-EtFOSAA		136 %		25-150						
Surrogate: M2-6:2 FTS		91.1 %		25-200						
Surrogate: M2-8:2 FTS		94.4 %		25-200						
Surrogate: M9PFNA		123 %		25-150						
Surrogate: M2-4:2 FTS		90.3 %		25-150						
Surrogate: d-N-MeFOSA		113 %		25-150						
Surrogate: d-N-EtFOSA		85.0 %		25-150						
Surrogate: M3HFPO-DA		127 %		25-150						
Surrogate: d9-N-EtFOSE		75.5 %		25-150						
Surrogate: d7-N-MeFOSE		81.5 %		25-150						



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

Yes / No / NA / NR

1) For each analytical method referenced in this laboratory, report package, were all sepcified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A) Were the method specified preservation, and holding time requirements met?	YES
1B) VPH and EPH Methods only: Was the method conducted without significant modifications (See section 11.3 of respective RCP methods)	NR
2) Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of custody document(s)?	YES
3) Were samples received at an appropriate temperature (< or = 6°C)?	YES
4) Were all QA/QC performance criteria specified in theCTDEP Reasonable Confidence Protocol documents achieved ?	NA
5 a) Were reporting limits specified or referenced on the chain-of-custody?	YES
5 b) Were these reporting limits met?	YES
6) For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	YES
7) Are project-specific matrix spikes and laboratory duplicates included in this data set?	YES

Notes: For all questions to which the response was No (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Reasonable Confidence". This form may not be altered and all question should be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: 

Position: Laboratory Manager

Printed name: Cassie L. Mosher

Date: 8/8/2024



York Narrative- CTDEEP RCP Introduction

This Work Order Narrative includes the following items for full review of any quality issues encountered with samples and their analyses for the parameters requested:

1. Sample Receipt Information, including a Sample Summary which cross references your sample ID with York Analytical sample ID, identifying the matrix and Date/Time collected and received at York.
2. Analysis Methodologies employed for the work order
3. Any Sample Issues encountered such as Holding time exceedances, improper containers/preservation, or any related issue with sample integrity
4. Specific Analysis Findings in order: Volatiles, Semi-Volatiles, Pesticides/PCBs, Herbicides, other GC parameters, Metals, Mercury, Wet Chemistry.
5. Analysis Findings Include:
 - BIAS Summary Report-Multiple Lines of Evidence
 - Analyte qualifier summary
 - Samples and associated Calibration Curve(s)
 - Calibration Outliers Discussion/Tabular presentation and affected samples
 - Initial Calibration Verification (ICV) information
 - Batch QC Sample Performance (Blanks, Blank Spikes (BS), MS/MSD)
 - Internal Standard Performance
 - Surrogate Performance
 - Example Calculations

York Analytical Work Order Narrative

Work Order Narrative

York Analytical Work Order No.: 24G0112

Client : VHB

Client Project ID : 43340 - Hempstead Park

Prepared for : Pamela Lind

1.0) Introduction

This work order Narrative applies to the following samples submitted to our laboratory on: 07/02/2024 12:06 PM

27 sample(s) were received intact in a custody-sealed cooler(s) unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ($\leq 6^{\circ}\text{C}$)
and documented as: {2.2}°C

Sample Summary

<u>SampleName</u>	<u>Lab Number</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
VHB-SB-13 (2.2-2.8ft)	24G0112-01	Soil	07/01/2024 9:40 AM	07/02/2024 12:06 PM
VHB-SB-13 (5-6.8ft)	24G0112-02	Soil	07/01/2024 9:45 AM	07/02/2024 12:06 PM
VHB-SB-13 (8-9ft)	24G0112-03	Soil	07/01/2024 9:50 AM	07/02/2024 12:06 PM
VHB-SB-14 (1-1.8ft)	24G0112-04	Soil	07/01/2024 10:25 AM	07/02/2024 12:06 PM
VHB-SB-14 (5-5.7ft)	24G0112-05	Soil	07/01/2024 10:30 AM	07/02/2024 12:06 PM
VHB-SB-14 (5.7-6.7ft)	24G0112-06	Soil	07/01/2024 10:35 AM	07/02/2024 12:06 PM
VHB-SB-15 (0-1ft)	24G0112-07	Soil	07/01/2024 11:00 AM	07/02/2024 12:06 PM
VHB-SB-16 (2-2.9ft)	24G0112-08	Soil	07/01/2024 11:10 AM	07/02/2024 12:06 PM
VHB-SB-16 (6-7.9ft)	24G0112-09	Soil	07/01/2024 11:15 AM	07/02/2024 12:06 PM
VHB-SB-16 (10-12ft)	24G0112-10	Soil	07/01/2024 11:20 AM	07/02/2024 12:06 PM
VHB-SB-17 (0-1.4ft)	24G0112-11	Soil	07/01/2024 11:30 AM	07/02/2024 12:06 PM
VHB-SB-17 (1.4-2.1ft)	24G0112-12	Soil	07/01/2024 11:35 AM	07/02/2024 12:06 PM
VHB-SB-17 (5.3-5.6ft)	24G0112-13	Soil	07/01/2024 11:40 AM	07/02/2024 12:06 PM
VHB-SB-18 (1-1.8ft)	24G0112-14	Soil	07/01/2024 11:50 AM	07/02/2024 12:06 PM
VHB-SB-18 (1.8-2.8ft)	24G0112-15	Soil	07/01/2024 11:55 AM	07/02/2024 12:06 PM
VHB-SB-18 (6.1-8ft)	24G0112-16	Soil	07/01/2024 12:00 PM	07/02/2024 12:06 PM
VHB-SB-19 (0.4-1.6ft)	24G0112-17	Soil	07/01/2024 12:15 PM	07/02/2024 12:06 PM
VHB-SB-19 (5.4-6.7ft)	24G0112-18	Soil	07/01/2024 12:20 PM	07/02/2024 12:06 PM
VHB-SB-19 (7-8.4ft)	24G0112-19	Soil	07/01/2024 12:25 PM	07/02/2024 12:06 PM
VHB-SB-20 (0.5-1.5ft)	24G0112-20	Soil	07/01/2024 12:30 PM	07/02/2024 12:06 PM
VHB-SB-20 (2-2.6ft)	24G0112-21	Soil	07/01/2024 12:35 PM	07/02/2024 12:06 PM
VHB-SB-20 (5.6-6.7ft)	24G0112-22	Soil	07/01/2024 12:40 PM	07/02/2024 12:06 PM
VHB-SB-21 (0.5-1.5ft)	24G0112-23	Soil	07/01/2024 1:10 PM	07/02/2024 12:06 PM
VHB-SB-21 (5.3-7ft)	24G0112-24	Soil	07/01/2024 1:10 PM	07/02/2024 12:06 PM
VHB-SB-21 (10-12ft)	24G0112-25	Soil	07/01/2024 1:20 PM	07/02/2024 12:06 PM
DUP-07012024	24G0112-26	Soil	07/01/2024 12:01 AM	07/02/2024 12:06 PM
Field Blank_07012024	24G0112-27	Water	07/01/2024 8:55 AM	07/02/2024 12:06 PM

WorkOrder Comments

Sample activations received by client 7/2/24 after samples were picked up. An updated COC was provided.

York Analytical Work Order Narrative

2.0 Methodology

<u>Analysis Class</u>	<u>Preparation Method</u>	<u>Analysis Methodology</u>
PFAS	EPA 1633 Prep	EPA 1633 Draft 3
WET	% Solids Prep	SM 2540G

Analyte List

<u>Method</u>	<u>Analyte</u>
EPA 1633 Draft 3	11CL-PF3OUdS ; 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) ; 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) ; 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) ; 3-Perfluoroheptyl propanoic acid (FHpPA) ; 3-Perfluoropentyl propanoic acid (FPePA) ; 3-Perfluoropropyl propanoic acid (FPrPA) ; 9CL-PF3ONS ; ADONA ; HFPO-DA (Gen-X) ; N-EtFOSA ; N-EtFOSAA ; N-EtFOSE ; N-MeFOSA ; N-MeFOSAA ; N-MeFOSE ; Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) ; Perfluoro-1-decanesulfonic acid (PFDS) ; Perfluoro-1-heptanesulfonic acid (PFHpS) ; Perfluoro-1-nonanesulfonic acid (PFNS) ; Perfluoro-1-octanesulfonamide (FOSA) ; Perfluoro-1-pentanesulfonate (PFPeS) ; Perfluoro-3,6-dioxaheptanoic acid (NFDHA) ; Perfluoro-4-oxapentanoic acid (PFMPA) ; Perfluoro-5-oxahexanoic acid (PFMBA) ; Perfluorobutanesulfonic acid (PFBS) ; Perfluorodecanoic acid (PFDA) ; Perfluorododecanesulfonic acid (PFDoS) ; Perfluorododecanoic acid (PFDoA) ; Perfluoroheptanoic acid (PFHpA) ; Perfluorohexanesulfonic acid (PFHxS) ; Perfluorohexanoic acid (PFHxA) ; Perfluoro-n-butanoic acid (PFBA) ; Perfluorononanoic acid (PFNA) ; Perfluorooctanesulfonic acid (PFOS) ; Perfluorooctanoic acid (PFOA) ; Perfluoropentanoic acid (PFPeA) ; Perfluorotetradecanoic acid (PFTA) ; Perfluorotridecanoic acid (PFTrDA) ; Perfluoroundecanoic acid (PFUnA)
SM 2540G	% Solids

3.0 Sample Issues

No issues were encountered with the samples submitted other than those detailed below.

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)		Low				
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low				
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	ADONA		high	high			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	HFPO-DA (Gen-X)		high				
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	N-EtFOSA			high			
PFAS	24G0112-01	VHB-SB-13 (2.2-2.8ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)		Low				
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low				
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	ADONA		high	high			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	HFPO-DA (Gen-X)		high				
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	N-EtFOSA			high			
PFAS	24G0112-04	VHB-SB-14 (1-1.8ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)		Low				
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low				
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	ADONA		high	high			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	HFPO-DA (Gen-X)		high				
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	N-EtFOSA			high			
PFAS	24G0112-07	VHB-SB-15 (0-1ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			

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Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)		Low				
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low				
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	ADONA		high	high			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	HFPO-DA (Gen-X)		high				
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	N-EtFOSA			high			
PFAS	24G0112-08	VHB-SB-16 (2-2.9ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low	Low			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	ADONA		high	high			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	HFPO-DA (Gen-X)			Low			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	N-EtFOSA		high	high			
PFAS	24G0112-09	VHB-SB-16 (6-7.9ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	11CL-PF3OUdS		high	high			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low	Low			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	ADONA		high	high			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	HFPO-DA (Gen-X)			Low			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	N-EtFOSA		high	high			
PFAS	24G0112-11	VHB-SB-17 (0-1.4ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	11CL-PF3OUdS		high	high			

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Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	3-Perfluoroheptyl propanoic acid (FHpPA)		Low	Low			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	9CL-PF3ONS		high	high			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	ADONA		high	high			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	HFPO-DA (Gen-X)			Low			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	N-EtFOSA		high	high			
PFAS	24G0112-14	VHB-SB-18 (1-1.8ft)	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-26	DUP-07012024	11CL-PF3OUdS		high	high			
PFAS	24G0112-26	DUP-07012024	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)		Low				
PFAS	24G0112-26	DUP-07012024	3-Perfluoroheptyl propanoic acid (FHpPA)		Low				
PFAS	24G0112-26	DUP-07012024	3-Perfluoropentyl propanoic acid (FPePA)		Low	Low			
PFAS	24G0112-26	DUP-07012024	3-Perfluoropropyl propanoic acid (FPrPA)		Low	Low			
PFAS	24G0112-26	DUP-07012024	9CL-PF3ONS		high	high			
PFAS	24G0112-26	DUP-07012024	ADONA		high	high			
PFAS	24G0112-26	DUP-07012024	HFPO-DA (Gen-X)		high				
PFAS	24G0112-26	DUP-07012024	N-EtFOSA			high			
PFAS	24G0112-26	DUP-07012024	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0112-27	Field Blank_07012024	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
VHB-SB-14 (1-1.8ft)	EPA 1633 Draft 3	24G0112-04	Soil	Perfluorohexanoic acid (PFHxA)	J
VHB-SB-15 (0-1ft)	EPA 1633 Draft 3	24G0112-07	Soil	Perfluoro-n-butanoic acid (PFBA)	J
VHB-SB-15 (0-1ft)	EPA 1633 Draft 3	24G0112-07	Soil	Perfluoropentanoic acid (PFPeA)	J
VHB-SB-16 (2-2.9ft)	EPA 1633 Draft 3	24G0112-08	Soil	Perfluorohexanoic acid (PFHxA)	J
VHB-SB-17 (0-1.4ft)	EPA 1633 Draft 3	24G0112-11	Soil	M7PFUdA	PFSu-H
VHB-SB-17 (0-1.4ft)	EPA 1633 Draft 3	24G0112-11	Soil	Perfluorohexanoic acid (PFHxA)	J
VHB-SB-17 (0-1.4ft)	EPA 1633 Draft 3	24G0112-11	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
VHB-SB-17 (0-1.4ft)	EPA 1633 Draft 3	24G0112-11	Soil	Perfluoropentanoic acid (PFPeA)	J
VHB-SB-18 (1-1.8ft)	EPA 1633 Draft 3	24G0112-14	Soil	Perfluorohexanoic acid (PFHxA)	J
DUP-07012024	EPA 1633 Draft 3	24G0112-26	Soil	Perfluorobutanesulfonic acid (PFBS)	J
DUP-07012024	EPA 1633 Draft 3	24G0112-26	Soil	Perfluorohexanoic acid (PFHxA)	J
Field Blank_07012024	EPA 1633 Draft 3	24G0112-27	Water	M4PFHpA	PFSu-H
Field Blank_07012024	EPA 1633 Draft 3	24G0112-27	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	BG40524-BLK1	Soil	Perfluoro-n-butanoic acid (PFBA)	J
	EPA 1633 Draft 3	BG40524-BS2	Soil	3-Perfluoropropyl propanoic acid (FPrPA)	J
	EPA 1633 Draft 3	BG40524-BS2	Soil	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	BG40777-MRL1	Water	11CL-PF3OUdS	J
	EPA 1633 Draft 3	BG40777-MRL1	Water	9CL-PF3ONS	J
	EPA 1633 Draft 3	BG40777-MRL1	Water	ADONA	J
	EPA 1633 Draft 3	BG40777-MRL1	Water	HFPO-DA (Gen-X)	J
	EPA 1633 Draft 3	BG40777-MRL1	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	BG41586-BS2	Soil	HFPO-DA (Gen-X)	J

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Qualifier Definitions :

J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.

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4.0 Analysis Issues

EPA 1633 Draft 3

PFAS, EPA 1633 Target List

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SF40019

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SF40019	S4F1245	S4F1245	Secondary Cal Check	S4F1245-SCV1	LCQQQ	QQQ40103.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV1	LCQQQ	QQQ41361.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB1	LCQQQ	QQQ41364.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV2	LCQQQ	QQQ41376.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB2	LCQQQ	QQQ41377.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV3	LCQQQ	QQQ41400.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB3	LCQQQ	QQQ41401.d
SF40019	BG40524	S4G1047	Blank	BG40524-BLK1	LCQQQ	QQQ41403.d
SF40019	BG40524	S4G1047	LCS	BG40524-BS1	LCQQQ	QQQ41404.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV4	LCQQQ	QQQ41408.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB4	LCQQQ	QQQ41409.d
SF40019	BG40524	S4G1047	LCS	BG40524-BS2	LCQQQ	QQQ41410.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV5	LCQQQ	QQQ41420.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB5	LCQQQ	QQQ41421.d
SF40019	BG40524	S4G1047	VHB-SB-13 (2.2-2.8ft)	24G0112-01	LCQQQ	QQQ41424.d
SF40019	BG40524	S4G1047	VHB-SB-14 (1-1.8ft)	24G0112-04	LCQQQ	QQQ41425.d
SF40019	BG40524	S4G1047	VHB-SB-15 (0-1ft)	24G0112-07	LCQQQ	QQQ41426.d
SF40019	BG40524	S4G1047	VHB-SB-16 (2-2.9ft)	24G0112-08	LCQQQ	QQQ41427.d
SF40019	BG40524	S4G1047	DUP-07012024	24G0112-26	LCQQQ	QQQ41428.d
SF40019	S4G1047	S4G1047	Calibration Check	S4G1047-CCV6	LCQQQ	QQQ41432.d
SF40019	S4G1047	S4G1047	Calibration Blank	S4G1047-CCB6	LCQQQ	QQQ41433.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV1	LCQQQ	QQQ41501.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB1	LCQQQ	QQQ41504.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV2	LCQQQ	QQQ41516.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB2	LCQQQ	QQQ41517.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV3	LCQQQ	QQQ41528.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB3	LCQQQ	QQQ41529.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV4	LCQQQ	QQQ41533.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB4	LCQQQ	QQQ41534.d
SF40019	BG40777	S4G1231	Blank	BG40777-BLK1	LCQQQ	QQQ41535.d
SF40019	BG40777	S4G1231	LCS	BG40777-BS1	LCQQQ	QQQ41536.d
SF40019	BG40777	S4G1231	LCS	BG40777-BS2	LCQQQ	QQQ41537.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV5	LCQQQ	QQQ41542.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB5	LCQQQ	QQQ41543.d
SF40019	BG40777	S4G1231	Field Blank_07012024	24G0112-27	LCQQQ	QQQ41550.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV6	LCQQQ	QQQ41554.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB6	LCQQQ	QQQ41555.d
SF40019	BG40777	S4G1231	Blank	BG40777-BLK2	LCQQQ	QQQ41558.d

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4.0 Analysis Issues

SF40019	BG40777	S4G1231	MRL Check	BG40777-MRL1	LCQQQ	QQQ41559.d
SF40019	S4G1231	S4G1231	Calibration Check	S4G1231-CCV7	LCQQQ	QQQ41560.d
SF40019	S4G1231	S4G1231	Calibration Blank	S4G1231-CCB7	LCQQQ	QQQ41561.d

Initial calibration for EPA 1633 Draft 3 exceeded method guidelines.

<u>Calibration</u>	<u>Intrument</u>	<u>Calibration Date</u>	<u>File ID</u>
SF40019	LCQQQ	6/11/2024 8:00:34 AM	QQQ40095.d

The following QC and or client samples were affected:

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EPA 1633 Draft 3

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 1633 Draft 3

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SF40019	S4G1047	S4G1047-CCV1	QQQ41361.d	07/10/24 09:07
SF40019	S4G1047	S4G1047-CCV2	QQQ41376.d	07/10/24 13:09
SF40019	S4G1047	S4G1047-CCV3	QQQ41400.d	07/10/24 17:15
SF40019	S4G1047	S4G1047-CCV4	QQQ41408.d	07/10/24 19:29
SF40019	S4G1047	S4G1047-CCV5	QQQ41420.d	07/10/24 22:44
SF40019	S4G1047	S4G1047-CCV6	QQQ41432.d	07/11/24 01:57
SF40019	S4G1231	S4G1231-CCV1	QQQ41501.d	07/12/24 10:00
SF40019	S4G1231	S4G1231-CCV2	QQQ41516.d	07/12/24 14:05
SF40019	S4G1231	S4G1231-CCV3	QQQ41528.d	07/12/24 17:18
SF40019	S4G1231	S4G1231-CCV4	QQQ41533.d	07/12/24 18:39
SF40019	S4G1231	S4G1231-CCV5	QQQ41542.d	07/12/24 21:05
SF40019	S4G1231	S4G1231-CCV6	QQQ41554.d	07/13/24 00:18
SF40019	S4G1231	S4G1231-CCV7	QQQ41560.d	07/13/24 01:55

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SF40019	S4G1047-CCV3	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ng/mL	6.52	9.50	68.7	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	HFPO-DA (Gen-X)	ng/mL	13.3	10.0	133	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	11CL-PF3OUdS	ng/mL	90.7	9.45	960	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	9CL-PF3ONS	ng/mL	98.2	9.35	1050	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	ADONA	ng/mL	80.4	9.45	851	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	3-Perfluoropropyl propanoic acid (FPrPA)	ng/mL	1.12	12.5	8.97	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	3-Perfluoropentyl propanoic acid (FPePA)	ng/mL	17.8	62.6	28.4	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	3-Perfluoroheptyl propanoic acid (FHpPA)	ng/mL	37.5	62.6	60	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	M2PFTeDA	ng/mL	2.05	1.25	164	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	d5-N-EtFOSAA	ng/mL	7.00	5.00	140	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	M2-6:2 FTS	ng/mL	2.85	4.76	59.9	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	M2-4:2 FTS	ng/mL	1.93	4.69	41.1	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	d-N-MeFOSA	ng/mL	0.943	2.50	37.7	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	d-N-EtFOSA	ng/mL	0.914	2.50	36.5	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	M3HFPO-DA	ng/mL	0.934	10.0	9.34	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	d9-N-EtFOSE	ng/mL	11.4	25.0	45.6	70 130	QQQ41400.d
SF40019	S4G1047-CCV3	d7-N-MeFOSE	ng/mL	12.5	25.0	50.2	70 130	QQQ41400.d
SF40019	S4G1047-CCV4	11CL-PF3OUdS	ng/mL	15.6	9.45	165	70 130	QQQ41408.d
SF40019	S4G1047-CCV4	9CL-PF3ONS	ng/mL	18.6	9.35	199	70 130	QQQ41408.d
SF40019	S4G1047-CCV4	ADONA	ng/mL	19.5	9.45	207	70 130	QQQ41408.d
SF40019	S4G1047-CCV4	3-Perfluoropropyl propanoic acid (FPrPA)	ng/mL	4.68	12.5	37.5	70 130	QQQ41408.d

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SF40019	S4G1047-CCV4	3-Perfluoropentyl propanoic acid (FPePA)	ng/mL	33.4	62.6	53.3	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	0.840	1.25	67.2	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	M2PFTeDA	ng/mL	0.536	1.25	42.9	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.28	2.50	51.3	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	M2-8:2 FTS	ng/mL	10.5	4.80	218	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	M2-4:2 FTS	ng/mL	2.15	4.69	45.8	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	d-N-MeFOSA	ng/mL	0.623	2.50	24.9	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	d-N-EtFOSA	ng/mL	0.282	2.50	11.3	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	M3HFPO-DA	ng/mL	5.15	10.0	51.5	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	d9-N-EtFOSE	ng/mL	4.90	25.0	19.6	70	130	QQQ41408.d
SF40019	S4G1047-CCV4	d7-N-MeFOSE	ng/mL	6.13	25.0	24.5	70	130	QQQ41408.d
SF40019	S4G1231-CCV2	d7-N-MeFOSE	ng/mL	16.9	25.0	67.5	70	130	QQQ41516.d
SF40019	S4G1231-CCV3	M2-4:2 FTS	ng/mL	3.00	4.69	64	70	130	QQQ41528.d
SF40019	S4G1231-CCV4	M2-4:2 FTS	ng/mL	3.08	4.69	65.6	70	130	QQQ41533.d

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SF40019	S4G1047	S4G1047-CCB1	Calibration Blank		QQQ41364.d
SF40019	S4G1047	S4G1047-CCB2	Calibration Blank		QQQ41377.d
SF40019	S4G1047	S4G1047-CCB3	Calibration Blank		QQQ41401.d
SF40019	S4G1047	BG40524-BLK1	Blank		QQQ41403.d
SF40019	S4G1047	BG40524-BS1	LCS		QQQ41404.d
SF40019	S4G1047	S4G1047-CCB4	Calibration Blank		QQQ41409.d
SF40019	S4G1047	BG40524-BS2	LCS		QQQ41410.d
SF40019	S4G1047	S4G1047-CCB5	Calibration Blank		QQQ41421.d
SF40019	S4G1047	24G0112-01	VHB-SB-13 (2.2-2.8ft)		QQQ41424.d
SF40019	S4G1047	24G0112-04	VHB-SB-14 (1-1.8ft)		QQQ41425.d
SF40019	S4G1047	24G0112-07	VHB-SB-15 (0-1ft)		QQQ41426.d
SF40019	S4G1047	24G0112-08	VHB-SB-16 (2-2.9ft)		QQQ41427.d
SF40019	S4G1047	24G0112-26	DUP-07012024		QQQ41428.d
SF40019	S4G1047	S4G1047-CCB6	Calibration Blank		QQQ41433.d
SF40019	S4G1231	S4G1231-CCB1	Calibration Blank		QQQ41504.d
SF40019	S4G1231	S4G1231-CCB2	Calibration Blank		QQQ41517.d
SF40019	S4G1231	S4G1231-CCB3	Calibration Blank		QQQ41529.d
SF40019	S4G1231	S4G1231-CCB4	Calibration Blank		QQQ41534.d
SF40019	S4G1231	BG40777-BLK1	Blank		QQQ41535.d
SF40019	S4G1231	BG40777-BS1	LCS		QQQ41536.d
SF40019	S4G1231	BG40777-BS2	LCS		QQQ41537.d
SF40019	S4G1231	S4G1231-CCB5	Calibration Blank		QQQ41543.d
SF40019	S4G1231	S4G1231-CCB6	Calibration Blank		QQQ41555.d
SF40019	S4G1231	BG40777-BLK2	Blank		QQQ41558.d
SF40019	S4G1231	BG40777-MRL1	MRL Check		QQQ41559.d
SF40019	S4G1231	S4G1231-CCB7	Calibration Blank		QQQ41561.d

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Batch QC

Method Blank-

	Batch	Sequence	Instrument	Blank	FileID		
PFAS	BG40524	S4G1047	LCQQQ	BG40524-BLK1	QQQ41403.d		
PFAS	BG40777	S4G1231	LCQQQ	BG40777-BLK1	QQQ41535.d		
PFAS	BG40777	S4G1231	LCQQQ	BG40777-BLK2	QQQ41558.d		
Sequence	SampleName	LabNumber	Matrix	Analyte	Result	MRL	RptUnits
S4G1047	Blank	BG40524-BLK1	Soil	Perfluoro-n-butanoic acid (P	0.163	0.789	ug/kg wet

The following QC and or client samples had positive(s) in associated blanks:

Batch	LabNumber	SampleName	File ID
BG40524	24G0112-01	VHB-SB-13 (2.2-2.8ft)	QQQ41424.d
BG40524	24G0112-04	VHB-SB-14 (1-1.8ft)	QQQ41425.d
BG40524	24G0112-07	VHB-SB-15 (0-1ft)	QQQ41426.d
BG40524	24G0112-08	VHB-SB-16 (2-2.9ft)	QQQ41427.d
BG40524	24G0112-26	DUP-07012024	QQQ41428.d
BG40524	BG40524-BS1	LCS	QQQ41404.d
BG40524	BG40524-BS2	LCS	QQQ41410.d

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SF40019	4G1047	BG40524-BS1	LCS	QQQ41404.d				
SF40019	4G1047	BG40524-BS2	LCS	QQQ41410.d				
SF40019	4G1231	BG40777-BS1	LCS	QQQ41536.d				
SF40019	4G1231	BG40777-BS2	LCS	QQQ41537.d				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G1047	LCS	BG40524-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		11.4		50 - 150	
S4G1047	LCS	BG40524-BS1	11CL-PF3OUdS		347		50 - 150	
S4G1047	LCS	BG40524-BS1	9CL-PF3ONS		435		50 - 150	
S4G1047	LCS	BG40524-BS1	ADONA		403		50 - 150	
S4G1047	LCS	BG40524-BS1	3-Perfluoropropyl propanoic acid (FPrPA)		12.4		50 - 150	
S4G1047	LCS	BG40524-BS1	3-Perfluoropentyl propanoic acid (FPePA)		33.7		50 - 150	
S4G1047	LCS	BG40524-BS1	N-EtFOSA		194		50 - 150	
S4G1047	LCS	BG40524-BS2	Perfluoro-4-oxapentanoic acid (PFMPA)		10.4		50 - 150	
S4G1047	LCS	BG40524-BS2	3-Perfluoropropyl propanoic acid (FPrPA)		27		50 - 150	
S4G1231	LCS	BG40777-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		40.1		50 - 150	
S4G1231	LCS	BG40777-BS2	Perfluoro-4-oxapentanoic acid (PFMPA)		34.4		50 - 150	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BG40524	24G0112-01	VHB-SB-13 (2.2-2.8ft)	
BG40524	24G0112-04	VHB-SB-14 (1-1.8ft)	

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BG40524	24G0112-07	VHB-SB-15 (0-1ft)
BG40524	24G0112-08	VHB-SB-16 (2-2.9ft)
BG40524	24G0112-26	DUP-07012024
BG40777	24G0112-27	Field Blank_0701202
BG40524	BG40524-BLK1	Blank
BG40777	BG40777-BLK1	Blank
BG40777	BG40777-BLK2	Blank
BG40777	BG40777-MRL1	MRL Check

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Dilutions: No sample dilutions were required.

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Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SF40019	Blank	BG40524-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	2.7	25 - 150
SF40019	Blank	BG40524-BLK1	M3HFPO-DA	16.4	25 - 150
SF40019	LCS	BG40524-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	3	25 - 150
SF40019	LCS	BG40524-BS1	M3HFPO-DA	18.6	25 - 150
SF40019	LCS	BG40524-BS2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.13	25 - 150
SF40019	LCS	BG40524-BS2	d-N-EtFOSA	20.7	25 - 150
SF40019	LCS	BG40524-BS2	d9-N-EtFOSE	20.5	25 - 150
SF40019	Blank	BG40777-BLK1	M4PFHpA	153	25 - 150
SF40019	LCS	BG40777-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	18.6	25 - 150
SF40019	LCS	BG40777-BS2	M4PFHpA	152	25 - 150
SF40019	LCS	BG40777-BS2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	14.8	25 - 150
SF40019	LCS	BG40777-BS2	d5-N-EtFOSAA	152	25 - 150
SF40019	Field Blank_07012024	24G0112-27	M4PFHpA	157	25 - 150
SF40019	Field Blank_07012024	24G0112-27	Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.84	25 - 150
SF40019	Blank	BG40777-BLK2	M3PFBS	158	25 - 150
SF40019	Blank	BG40777-BLK2	M4PFHpA	171	25 - 150
SF40019	Blank	BG40777-BLK2	M3PFHxS	159	25 - 150
SF40019	Blank	BG40777-BLK2	M7PFUDa	155	25 - 150
SF40019	Blank	BG40777-BLK2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	15.3	25 - 150
SF40019	Blank	BG40777-BLK2	d5-N-EtFOSAA	151	25 - 150
SF40019	MRL Check	BG40777-MRL1	M4PFHpA	159	25 - 150
SF40019	Calibration Blank	S4G1047-CCB2	M2PFTeDA	159	10 - 150
SF40019	Calibration Blank	S4G1047-CCB2	d9-N-EtFOSE	156	25 - 150
SF40019	Calibration Blank	S4G1047-CCB2	d7-N-MeFOSE	160	25 - 150
SF40019	Calibration Check	S4G1047-CCV3	M2PFTeDA	164	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	d5-N-EtFOSAA	140	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	M2-6:2 FTS	59.9	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	M2-4:2 FTS	41.1	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	d-N-MeFOSA	37.7	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	d-N-EtFOSA	36.5	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	M3HFPO-DA	9.34	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	d9-N-EtFOSE	45.6	70 - 130
SF40019	Calibration Check	S4G1047-CCV3	d7-N-MeFOSE	50.2	70 - 130
SF40019	Calibration Blank	S4G1047-CCB3	M2PFTeDA	162	10 - 150
SF40019	Calibration Blank	S4G1047-CCB3	M3HFPO-DA	15.2	25 - 150
SF40019	Calibration Check	S4G1047-CCV4	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	67.2	70 - 130

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SF40019	Calibration Check	S4G1047-CCV4	M2PFTeDA	42.9	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	51.3	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	M2-8:2 FTS	218	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	M2-4:2 FTS	45.8	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	d-N-MeFOSA	24.9	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	d-N-EtFOSA	11.3	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	M3HFPO-DA	51.5	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	d9-N-EtFOSE	19.6	70 - 130
SF40019	Calibration Check	S4G1047-CCV4	d7-N-MeFOSE	24.5	70 - 130
SF40019	Calibration Blank	S4G1047-CCB4	d-N-EtFOSA	20.7	25 - 150
SF40019	Calibration Check	S4G1231-CCV2	d7-N-MeFOSE	67.5	70 - 130
SF40019	Calibration Check	S4G1231-CCV3	M2-4:2 FTS	64	70 - 130
SF40019	Calibration Check	S4G1231-CCV4	M2-4:2 FTS	65.6	70 - 130

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4.0 Analysis Issues

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PFAS, EPA 1633 Target List

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SG40042

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SG40042	S4G2446	S4G2446	Secondary Cal Check	S4G2446-SCV1	LCQQQ	QQQ41913.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV1	LCQQQ	QQQ42073.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB1	LCQQQ	QQQ42076.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV2	LCQQQ	QQQ42088.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB2	LCQQQ	QQQ42089.d
SG40042	BG41586	S4G2947	Blank	BG41586-BLK1	LCQQQ	QQQ42090.d
SG40042	BG41586	S4G2947	LCS	BG41586-BS1	LCQQQ	QQQ42091.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV3	LCQQQ	QQQ42100.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB3	LCQQQ	QQQ42101.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV4	LCQQQ	QQQ42112.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB4	LCQQQ	QQQ42113.d
SG40042	BG41586	S4G2947	VHB-SB-16 (6-7.9ft)	24G0112-09	LCQQQ	QQQ42115.d
SG40042	BG41586	S4G2947	VHB-SB-17 (0-1.4ft)	24G0112-11	LCQQQ	QQQ42116.d
SG40042	BG41586	S4G2947	VHB-SB-18 (1-1.8ft)	24G0112-14	LCQQQ	QQQ42117.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV5	LCQQQ	QQQ42124.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB5	LCQQQ	QQQ42125.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV6	LCQQQ	QQQ42136.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB6	LCQQQ	QQQ42137.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV7	LCQQQ	QQQ42148.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB7	LCQQQ	QQQ42149.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV8	LCQQQ	QQQ42154.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB8	LCQQQ	QQQ42155.d
SG40042	BG41586	S4G2947	LCS	BG41586-BS2	LCQQQ	QQQ42164.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCV9	LCQQQ	QQQ42165.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCB9	LCQQQ	QQQ42166.d
SG40042	S4G2947	S4G2947	Calibration Check	S4G2947-CCVA	LCQQQ	QQQ42172.d
SG40042	S4G2947	S4G2947	Calibration Blank	S4G2947-CCBA	LCQQQ	QQQ42173.d

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4.0 Analysis Issues

Initial calibration for EPA 1633 Draft 3 exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SG40042	LCQQQ	7/24/2024 8:00:16 AM	QQQ41904.d

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
Perfluoro-3,6-dioxaheptanoic aci (NFDHA)	20.50	20						Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4G2446-SCV1		QQQ41913.d
Calibration Check	S4G2947-CCV1		QQQ42073.d
Calibration Blank	S4G2947-CCB1		QQQ42076.d
Calibration Check	S4G2947-CCV2		QQQ42088.d
Calibration Blank	S4G2947-CCB2		QQQ42089.d
Blank	BG41586-BLK1		QQQ42090.d
LCS	BG41586-BS1		QQQ42091.d
Calibration Check	S4G2947-CCV3		QQQ42100.d
Calibration Blank	S4G2947-CCB3		QQQ42101.d
Calibration Check	S4G2947-CCV4		QQQ42112.d
Calibration Blank	S4G2947-CCB4		QQQ42113.d
VHB-SB-16 (6-7.9ft)	24G0112-09		QQQ42115.d
VHB-SB-17 (0-1.4ft)	24G0112-11		QQQ42116.d
VHB-SB-18 (1-1.8ft)	24G0112-14		QQQ42117.d
Calibration Check	S4G2947-CCV5		QQQ42124.d
Calibration Blank	S4G2947-CCB5		QQQ42125.d
Calibration Check	S4G2947-CCV6		QQQ42136.d
Calibration Blank	S4G2947-CCB6		QQQ42137.d
Calibration Check	S4G2947-CCV7		QQQ42148.d
Calibration Blank	S4G2947-CCB7		QQQ42149.d
Calibration Check	S4G2947-CCV8		QQQ42154.d
Calibration Blank	S4G2947-CCB8		QQQ42155.d
LCS	BG41586-BS2		QQQ42164.d
Calibration Check	S4G2947-CCV9		QQQ42165.d
Calibration Blank	S4G2947-CCB9		QQQ42166.d
Calibration Check	S4G2947-CCVA		QQQ42172.d
Calibration Blank	S4G2947-CCBA		QQQ42173.d

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Initial Calibration Verification-

The initial calibration verification for analytical method EPA 1633 Draft 3

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SG40042	S4G2947	S4G2947-CCV1	QQQ42073.d	07/29/24 10:02
SG40042	S4G2947	S4G2947-CCV2	QQQ42088.d	07/29/24 14:05
SG40042	S4G2947	S4G2947-CCV3	QQQ42100.d	07/29/24 17:02
SG40042	S4G2947	S4G2947-CCV4	QQQ42112.d	07/29/24 21:11
SG40042	S4G2947	S4G2947-CCV5	QQQ42124.d	07/30/24 00:24
SG40042	S4G2947	S4G2947-CCV6	QQQ42136.d	07/30/24 03:38
SG40042	S4G2947	S4G2947-CCV7	QQQ42148.d	07/30/24 06:52
SG40042	S4G2947	S4G2947-CCV8	QQQ42154.d	07/30/24 08:45
SG40042	S4G2947	S4G2947-CCV9	QQQ42165.d	07/30/24 11:43
SG40042	S4G2947	S4G2947-CCVA	QQQ42172.d	07/30/24 13:37

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SG40042	S4G2947-CCV1	M2-4:2 FTS	ng/mL	7.81	4.69	166	70 130	QQQ42073.d
SG40042	S4G2947-CCV1	d-N-EtFOSA	ng/mL	1.53	2.50	61.4	70 130	QQQ42073.d
SG40042	S4G2947-CCV2	11CL-PF3OUdS	ng/mL	29.6	9.45	313	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	9CL-PF3ONS	ng/mL	27.5	9.35	294	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	ADONA	ng/mL	20.3	9.45	215	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	3-Perfluoropropyl propanoic acid (FPrPA)	ng/mL	4.02	12.5	32.2	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	3-Perfluoropentyl propanoic acid (FPePA)	ng/mL	31.8	62.6	50.8	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	3-Perfluoroheptyl propanoic acid (FHpPA)	ng/mL	37.7	62.6	60.2	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M7PFUdA	ng/mL	1.66	1.25	133	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.80	1.25	144	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M2PFTeDA	ng/mL	1.97	1.25	157	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.57	2.50	62.9	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	d3-N-MeFOSAA	ng/mL	3.30	5.00	66	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M2-6:2 FTS	ng/mL	1.81	4.76	38.1	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M2-8:2 FTS	ng/mL	2.40	4.80	50	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M2-4:2 FTS	ng/mL	2.10	4.69	44.8	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	d-N-MeFOSA	ng/mL	0.762	2.50	30.5	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	d-N-EtFOSA	ng/mL	0.768	2.50	30.7	70 130	QQQ42088.d
SG40042	S4G2947-CCV2	M3HFPO-DA	ng/mL	4.37	10.0	43.7	70 130	QQQ42088.d
SG40042	S4G2947-CCV3	11CL-PF3OUdS	ng/mL	33.7	9.45	357	70 130	QQQ42100.d
SG40042	S4G2947-CCV3	9CL-PF3ONS	ng/mL	34.5	9.35	369	70 130	QQQ42100.d
SG40042	S4G2947-CCV3	ADONA	ng/mL	25.9	9.45	274	70 130	QQQ42100.d
SG40042	S4G2947-CCV3	3-Perfluoropropyl propanoic acid (FPrPA)	ng/mL	2.66	12.5	21.3	70 130	QQQ42100.d

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SG40042	S4G2947-CCV3	3-Perfluoropentyl propanoic acid (FPePA)	ng/mL	30.3	62.6	48.5	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	N-EtFOSA	ng/mL	4.68	2.50	187	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.58	2.50	63.2	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	d5-N-EtFOSAA	ng/mL	7.48	5.00	150	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	M2-6:2 FTS	ng/mL	1.89	4.76	39.6	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	M2-4:2 FTS	ng/mL	2.22	4.69	47.3	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	d-N-MeFOSA	ng/mL	0.485	2.50	19.4	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	d-N-EtFOSA	ng/mL	0.277	2.50	11.1	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	M3HFPO-DA	ng/mL	3.50	10.0	35	70	130	QQQ42100.d
SG40042	S4G2947-CCV3	d9-N-EtFOSE	ng/mL	11.7	25.0	46.9	70	130	QQQ42100.d
SG40042	S4G2947-CCV4	N-EtFOSA	ng/mL	3.72	2.50	149	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.81	1.25	145	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	M2PFTeDA	ng/mL	2.46	1.25	197	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.37	2.50	54.7	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	d3-N-MeFOSAA	ng/mL	2.97	5.00	59.3	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	d5-N-EtFOSAA	ng/mL	3.00	5.00	59.9	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	M2-6:2 FTS	ng/mL	1.87	4.76	39.4	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	M2-8:2 FTS	ng/mL	2.33	4.80	48.6	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	M2-4:2 FTS	ng/mL	2.09	4.69	44.5	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	d-N-EtFOSA	ng/mL	1.46	2.50	58.4	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	d9-N-EtFOSE	ng/mL	46.7	25.0	187	70	130	QQQ42112.d
SG40042	S4G2947-CCV4	d7-N-MeFOSE	ng/mL	49.0	25.0	196	70	130	QQQ42112.d
SG40042	S4G2947-CCV5	N-EtFOSA	ng/mL	3.44	2.50	138	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	0.769	1.25	61.5	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	M2PFTeDA	ng/mL	0.619	1.25	49.5	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	M2-8:2 FTS	ng/mL	6.80	4.80	142	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	d-N-MeFOSA	ng/mL	0.798	2.50	31.9	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	d-N-EtFOSA	ng/mL	0.506	2.50	20.2	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	d9-N-EtFOSE	ng/mL	9.70	25.0	38.8	70	130	QQQ42124.d
SG40042	S4G2947-CCV5	d7-N-MeFOSE	ng/mL	14.2	25.0	56.9	70	130	QQQ42124.d
SG40042	S4G2947-CCV6	N-EtFOSA	ng/mL	3.73	2.50	149	70	130	QQQ42136.d
SG40042	S4G2947-CCV6	M2-4:2 FTS	ng/mL	6.32	4.69	135	70	130	QQQ42136.d
SG40042	S4G2947-CCV6	d-N-MeFOSA	ng/mL	1.73	2.50	69.2	70	130	QQQ42136.d
SG40042	S4G2947-CCV6	d-N-EtFOSA	ng/mL	1.17	2.50	47	70	130	QQQ42136.d
SG40042	S4G2947-CCV7	N-EtFOSA	ng/mL	3.61	2.50	144	70	130	QQQ42148.d
SG40042	S4G2947-CCV7	M2-6:2 FTS	ng/mL	6.29	4.76	132	70	130	QQQ42148.d
SG40042	S4G2947-CCV7	M2-4:2 FTS	ng/mL	8.43	4.69	180	70	130	QQQ42148.d
SG40042	S4G2947-CCV7	d-N-MeFOSA	ng/mL	1.75	2.50	69.9	70	130	QQQ42148.d
SG40042	S4G2947-CCV7	d-N-EtFOSA	ng/mL	1.19	2.50	47.7	70	130	QQQ42148.d
SG40042	S4G2947-CCV8	N-EtFOSA	ng/mL	4.70	2.50	188	70	130	QQQ42154.d
SG40042	S4G2947-CCV8	M2-6:2 FTS	ng/mL	6.38	4.76	134	70	130	QQQ42154.d
SG40042	S4G2947-CCV8	M2-4:2 FTS	ng/mL	8.67	4.69	185	70	130	QQQ42154.d
SG40042	S4G2947-CCV8	d-N-EtFOSA	ng/mL	1.08	2.50	43.1	70	130	QQQ42154.d

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SG40042	S4G2947-CCV9	N-EtFOSA	ng/mL	5.16	2.50	206	70	130	QQQ42165.d
SG40042	S4G2947-CCV9	M2-6:2 FTS	ng/mL	6.32	4.76	133	70	130	QQQ42165.d
SG40042	S4G2947-CCV9	M2-4:2 FTS	ng/mL	8.43	4.69	180	70	130	QQQ42165.d
SG40042	S4G2947-CCV9	d-N-EtFOSA	ng/mL	1.10	2.50	43.8	70	130	QQQ42165.d
SG40042	S4G2947-CCVA	N-EtFOSA	ng/mL	4.72	2.50	189	70	130	QQQ42172.d
SG40042	S4G2947-CCVA	M2-6:2 FTS	ng/mL	6.88	4.76	144	70	130	QQQ42172.d
SG40042	S4G2947-CCVA	M2-8:2 FTS	ng/mL	6.26	4.80	131	70	130	QQQ42172.d
SG40042	S4G2947-CCVA	M2-4:2 FTS	ng/mL	9.42	4.69	201	70	130	QQQ42172.d
SG40042	S4G2947-CCVA	d-N-EtFOSA	ng/mL	1.16	2.50	46.3	70	130	QQQ42172.d

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SG40042	S4G2947	S4G2947-CCB1	Calibration Blank		QQQ42076.d
SG40042	S4G2947	S4G2947-CCB2	Calibration Blank		QQQ42089.d
SG40042	S4G2947	BG41586-BLK1	Blank		QQQ42090.d
SG40042	S4G2947	BG41586-BS1	LCS		QQQ42091.d
SG40042	S4G2947	S4G2947-CCB3	Calibration Blank		QQQ42101.d
SG40042	S4G2947	S4G2947-CCB4	Calibration Blank		QQQ42113.d
SG40042	S4G2947	24G0112-09	VHB-SB-16 (6-7.9ft)		QQQ42115.d
SG40042	S4G2947	24G0112-11	VHB-SB-17 (0-1.4ft)		QQQ42116.d
SG40042	S4G2947	24G0112-14	VHB-SB-18 (1-1.8ft)		QQQ42117.d
SG40042	S4G2947	S4G2947-CCB5	Calibration Blank		QQQ42125.d
SG40042	S4G2947	S4G2947-CCB6	Calibration Blank		QQQ42137.d
SG40042	S4G2947	S4G2947-CCB7	Calibration Blank		QQQ42149.d
SG40042	S4G2947	S4G2947-CCB8	Calibration Blank		QQQ42155.d
SG40042	S4G2947	BG41586-BS2	LCS		QQQ42164.d
SG40042	S4G2947	S4G2947-CCB9	Calibration Blank		QQQ42166.d
SG40042	S4G2947	S4G2947-CCBA	Calibration Blank		QQQ42173.d

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Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
PFAS	BG41586	S4G2947	LCQQQ	BG41586-BLK1	QQQ42090.d

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SG40042	4G2947	BG41586-BS1	LCS	QQQ42091.d				
SG40042	4G2947	BG41586-BS2	LCS	QQQ42164.d				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G2947	LCS	BG41586-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		39		50 - 150	
S4G2947	LCS	BG41586-BS1	11CL-PF3OUdS		257		50 - 150	
S4G2947	LCS	BG41586-BS1	9CL-PF3ONS		323		50 - 150	
S4G2947	LCS	BG41586-BS1	ADONA		324		50 - 150	
S4G2947	LCS	BG41586-BS1	3-Perfluoropropyl propanoic acid (FPrPA)		17.7		50 - 150	
S4G2947	LCS	BG41586-BS1	3-Perfluoropentyl propanoic acid (FPePA)		43.2		50 - 150	
S4G2947	LCS	BG41586-BS1	3-Perfluoroheptyl propanoic acid (FHpPA)		44.9		50 - 150	
S4G2947	LCS	BG41586-BS2	HFPO-DA (Gen-X)		46.4		50 - 150	
S4G2947	LCS	BG41586-BS2	N-EtFOSA		162		50 - 150	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BG41586	24G0112-09	VHB-SB-16 (6-7.9ft)	
BG41586	24G0112-11	VHB-SB-17 (0-1.4ft)	
BG41586	24G0112-14	VHB-SB-18 (1-1.8ft)	
BG41586	BG41586-BLK1	Blank	

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Dilutions: No sample dilutions were required.

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Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SG40042	Blank	BG41586-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	21.9	25 - 150
SG40042	Blank	BG41586-BLK1	d-N-MeFOSA	15	25 - 150
SG40042	LCS	BG41586-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	14.6	25 - 150
SG40042	LCS	BG41586-BS1	d-N-MeFOSA	19.8	25 - 150
SG40042	VHB-SB-17 (0-1.4ft)	24G0112-11	M7PFUDa	157	25 - 150
SG40042	VHB-SB-17 (0-1.4ft)	24G0112-11	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	156	25 - 150
SG40042	LCS	BG41586-BS2	M2-4:2 FTS	237	25 - 150
SG40042	Calibration Check	S4G2947-CCV1	M2-4:2 FTS	166	70 - 130
SG40042	Calibration Check	S4G2947-CCV1	d-N-EtFOSA	61.4	70 - 130
SG40042	Calibration Blank	S4G2947-CCB1	M2-4:2 FTS	221	25 - 150
SG40042	Calibration Check	S4G2947-CCV2	M7PFUDa	133	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	144	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	M2PFTeDA	157	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	62.9	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	d3-N-MeFOSAA	66	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	M2-6:2 FTS	38.1	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	M2-8:2 FTS	50	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	M2-4:2 FTS	44.8	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	d-N-MeFOSA	30.5	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	d-N-EtFOSA	30.7	70 - 130
SG40042	Calibration Check	S4G2947-CCV2	M3HFPO-DA	43.7	70 - 130
SG40042	Calibration Blank	S4G2947-CCB2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	161	25 - 150
SG40042	Calibration Blank	S4G2947-CCB2	M2PFTeDA	166	10 - 150
SG40042	Calibration Check	S4G2947-CCV3	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	63.2	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	d5-N-EtFOSAA	150	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	M2-6:2 FTS	39.6	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	M2-4:2 FTS	47.3	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	d-N-MeFOSA	19.4	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	d-N-EtFOSA	11.1	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	M3HFPO-DA	35	70 - 130
SG40042	Calibration Check	S4G2947-CCV3	d9-N-EtFOSE	46.9	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	145	70 - 130

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SG40042	Calibration Check	S4G2947-CCV4	M2PFTeDA	197	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	54.7	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	d3-N-MeFOSAA	59.3	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	d5-N-EtFOSAA	59.9	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	M2-6:2 FTS	39.4	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	M2-8:2 FTS	48.6	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	M2-4:2 FTS	44.5	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	d-N-EtFOSA	58.4	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	d9-N-EtFOSE	187	70 - 130
SG40042	Calibration Check	S4G2947-CCV4	d7-N-MeFOSE	196	70 - 130
SG40042	Calibration Blank	S4G2947-CCB4	M2PFTeDA	215	10 - 150
SG40042	Calibration Blank	S4G2947-CCB4	d9-N-EtFOSE	217	25 - 150
SG40042	Calibration Blank	S4G2947-CCB4	d7-N-MeFOSE	198	25 - 150
SG40042	Calibration Check	S4G2947-CCV5	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	61.5	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	M2PFTeDA	49.5	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	M2-8:2 FTS	142	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	d-N-MeFOSA	31.9	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	d-N-EtFOSA	20.2	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	d9-N-EtFOSE	38.8	70 - 130
SG40042	Calibration Check	S4G2947-CCV5	d7-N-MeFOSE	56.9	70 - 130
SG40042	Calibration Blank	S4G2947-CCB5	d-N-EtFOSA	22.8	25 - 150
SG40042	Calibration Check	S4G2947-CCV6	M2-4:2 FTS	135	70 - 130
SG40042	Calibration Check	S4G2947-CCV6	d-N-MeFOSA	69.2	70 - 130
SG40042	Calibration Check	S4G2947-CCV6	d-N-EtFOSA	47	70 - 130
SG40042	Calibration Check	S4G2947-CCV7	M2-6:2 FTS	132	70 - 130
SG40042	Calibration Check	S4G2947-CCV7	M2-4:2 FTS	180	70 - 130
SG40042	Calibration Check	S4G2947-CCV7	d-N-MeFOSA	69.9	70 - 130
SG40042	Calibration Check	S4G2947-CCV7	d-N-EtFOSA	47.7	70 - 130
SG40042	Calibration Blank	S4G2947-CCB7	M2-4:2 FTS	187	25 - 150
SG40042	Calibration Check	S4G2947-CCV8	M2-6:2 FTS	134	70 - 130
SG40042	Calibration Check	S4G2947-CCV8	M2-4:2 FTS	185	70 - 130
SG40042	Calibration Check	S4G2947-CCV8	d-N-EtFOSA	43.1	70 - 130
SG40042	Calibration Blank	S4G2947-CCB8	M2-4:2 FTS	198	25 - 150
SG40042	Calibration Check	S4G2947-CCV9	M2-6:2 FTS	133	70 - 130
SG40042	Calibration Check	S4G2947-CCV9	M2-4:2 FTS	180	70 - 130
SG40042	Calibration Check	S4G2947-CCV9	d-N-EtFOSA	43.8	70 - 130
SG40042	Calibration Blank	S4G2947-CCB9	M2-4:2 FTS	217	25 - 150
SG40042	Calibration Check	S4G2947-CCVA	M2-6:2 FTS	144	70 - 130
SG40042	Calibration Check	S4G2947-CCVA	M2-8:2 FTS	131	70 - 130
SG40042	Calibration Check	S4G2947-CCVA	M2-4:2 FTS	201	70 - 130
SG40042	Calibration Check	S4G2947-CCVA	d-N-EtFOSA	46.3	70 - 130
SG40042	Calibration Blank	S4G2947-CCBA	M2-4:2 FTS	231	25 - 150

York Analytical Work Order Narrative

4.0 Analysis Issues

SM 2540G

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

SM 2540G

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

York Analytical Laboratories, Inc. **Formulae Used for Sample Calculations**

1. **Volatiles in Air-ppbv**

Cx (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_x = \frac{(A_x)(C_{is})(DF)}{(A_{is})(RRF)}$$

2. **Volatiles in Air-ug/m³**

Cx (ug/m³) = Compound concentration in ug/m³

$$C_x (\text{ug/m}^3) = \frac{(\text{ppbv} \times \text{Molecular wt.})}{(24.040)}$$

3. **Volatile Organics (water and soil), ug/L or ug/kg**

Soils/Waters

Medium Level Soils

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})}$$

$$C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

4. **Semi-Volatiles (waters and soils)**

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

5. **Pesticides/PCB (waters and soils), DRO, CTETPH**

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

Cx = concentration of analyte as ug/L or ug/kg

Ax = Area of the characteristic ion for the compound to be measured, counts.

Ais = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

VA = volume of MeOH aliquot for medium level soils

VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



Analytical Batch Summary

Batch ID: BG40524 **Preparation Method:** EPA 1633 Prep **Prepared By:** K H

YORK Sample ID	Client Sample ID	Preparation Date
24G0112-01	VHB-SB-13 (2.2-2.8ft)	07/09/24
24G0112-04	VHB-SB-14 (1-1.8ft)	07/09/24
24G0112-07	VHB-SB-15 (0-1ft)	07/09/24
24G0112-08	VHB-SB-16 (2-2.9ft)	07/09/24
24G0112-26	DUP-07012024	07/09/24
BG40524-BLK1	Blank	07/09/24
BG40524-BS1	LCS	07/09/24
BG40524-BS2	LCS	07/09/24

Batch ID: BG40702 **Preparation Method:** % Solids Prep **Prepared By:** BMC

YORK Sample ID	Client Sample ID	Preparation Date
24G0112-01	VHB-SB-13 (2.2-2.8ft)	07/11/24
24G0112-04	VHB-SB-14 (1-1.8ft)	07/11/24
24G0112-07	VHB-SB-15 (0-1ft)	07/11/24
24G0112-08	VHB-SB-16 (2-2.9ft)	07/11/24
24G0112-26	DUP-07012024	07/11/24
BG40702-DUP1	Duplicate	07/11/24

Batch ID: BG40777 **Preparation Method:** EPA 1633 Prep **Prepared By:** SAB

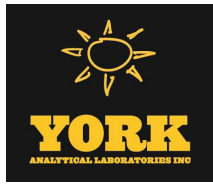
YORK Sample ID	Client Sample ID	Preparation Date
24G0112-27	Field Blank_07012024	07/11/24
BG40777-BLK1	Blank	07/11/24
BG40777-BLK2	Blank	07/11/24
BG40777-BS1	LCS	07/11/24
BG40777-BS2	LCS	07/11/24
BG40777-MRL1	MRL Check	07/11/24

Batch ID: BG41586 **Preparation Method:** EPA 1633 Prep **Prepared By:** K H

YORK Sample ID	Client Sample ID	Preparation Date
24G0112-09	VHB-SB-16 (6-7.9ft)	07/24/24
24G0112-11	VHB-SB-17 (0-1.4ft)	07/24/24
24G0112-14	VHB-SB-18 (1-1.8ft)	07/24/24
BG41586-BLK1	Blank	07/24/24
BG41586-BS1	LCS	07/24/24
BG41586-BS2	LCS	07/24/24

Batch ID: BG41588 **Preparation Method:** % Solids Prep **Prepared By:** AC

YORK Sample ID	Client Sample ID	Preparation Date
24G0112-09	VHB-SB-16 (6-7.9ft)	07/25/24



24G0112-11	VHB-SB-17 (0-1.4ft)	07/25/24
24G0112-14	VHB-SB-18 (1-1.8ft)	07/25/24
BG41588-DUP1	Duplicate	07/25/24



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40524 - EPA 1633 Prep

Blank (BG40524-BLK1)

Prepared: 07/09/2024 Analyzed: 07/10/2024

Perfluorobutanesulfonic acid (PFBS)	ND	0.175	ug/kg wet								
Perfluorohexanoic acid (PFHxA)	ND	0.197	"								
Perfluoroheptanoic acid (PFHpA)	ND	0.197	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	0.180	"								
Perfluorooctanoic acid (PFOA)	ND	0.197	"								
Perfluorooctanesulfonic acid (PFOS)	ND	0.183	"								
Perfluorononanoic acid (PFNA)	ND	0.197	"								
Perfluorodecanoic acid (PFDA)	ND	0.197	"								
Perfluoroundecanoic acid (PFUnA)	ND	0.197	"								
Perfluorododecanoic acid (PFDoA)	ND	0.197	"								
Perfluorotridecanoic acid (PFTrDA)	ND	0.197	"								
Perfluorotetradecanoic acid (PFTA)	ND	0.197	"								
N-MeFOSAA	ND	0.197	"								
N-EtFOSAA	ND	0.197	"								
Perfluoropentanoic acid (PFPeA)	ND	0.394	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.197	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.197	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.190	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	0.750	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	0.757	"								
Perfluoro-n-butanoic acid (PFBA)	0.163	0.789	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.351	"								
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.394	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.394	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.394	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.185	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	0.740	"								
HFPO-DA (Gen-X)	ND	0.789	"								
11CL-PF3OUdS	ND	0.746	"								
9CL-PF3ONS	ND	0.738	"								
ADONA	ND	0.746	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	0.191	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	0.189	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	0.986	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	4.93	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	4.93	"								
N-MeFOSE	ND	1.97	"								
N-MeFOSA	ND	0.197	"								
N-EtFOSE	ND	1.97	"								
N-EtFOSA	ND	0.197	"								
Surrogate: M3PFBS	1.87		"	2.30		81.4	25-150				
Surrogate: M5PFHxA	2.12		"	2.47		85.8	25-150				
Surrogate: M4PFHpA	2.11		"	2.47		85.7	25-150				
Surrogate: M3PFHxS	1.90		"	2.34		81.3	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	2.00		"	2.47		81.2	25-150				
Surrogate: M6PFDA	0.809		"	1.23		65.6	25-150				
Surrogate: M7PFUdA	0.971		"	1.23		78.8	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.941		"	1.23		76.4	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40524 - EPA 1633 Prep

Blank (BG40524-BLK1)

Prepared: 07/09/2024 Analyzed: 07/10/2024

Surrogate: M2PFTeDA	0.894		ug/kg wet	1.23		72.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.266		"	9.86		2.70	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.82		"	2.36		77.0	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.24		"	4.93		65.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.66		"	2.47		67.2	10-150				
Surrogate: d3-N-MeFOSAA	3.99		"	4.93		80.8	25-150				
Surrogate: d5-N-EtFOSAA	5.25		"	4.93		106	25-150				
Surrogate: M2-6:2 FTS	2.47		"	4.69		52.7	25-200				
Surrogate: M2-8:2 FTS	2.59		"	4.73		54.8	25-200				
Surrogate: M9PFNA	1.09		"	1.23		88.6	25-150				
Surrogate: M2-4:2 FTS	1.75		"	4.63		37.8	25-150				
Surrogate: d-N-MeFOSA	0.648		"	2.47		26.3	25-150				
Surrogate: d-N-EtFOSA	0.651		"	2.47		26.4	25-150				
Surrogate: M3HFPO-DA	1.62		"	9.86		16.4	25-150				
Surrogate: d9-N-EtFOSE	7.13		"	24.7		28.9	25-150				
Surrogate: d7-N-MeFOSE	8.51		"	24.7		34.5	25-150				

LCS (BG40524-BS1)

Prepared: 07/09/2024 Analyzed: 07/10/2024

Perfluorobutanesulfonic acid (PFBS)	3.50	0.174	ug/kg wet	3.48		100	50-150				
Perfluorohexanoic acid (PFHxA)	3.74	0.197	"	3.94		95.1	50-150				
Perfluoroheptanoic acid (PFHpA)	4.24	0.197	"	3.94		108	50-150				
Perfluorohexanesulfonic acid (PFHxS)	3.51	0.180	"	3.60		97.5	50-150				
Perfluorooctanoic acid (PFOA)	4.00	0.197	"	3.94		102	50-150				
Perfluorooctanesulfonic acid (PFOS)	3.28	0.183	"	3.66		89.6	50-150				
Perfluorononanoic acid (PFNA)	3.72	0.197	"	3.94		94.5	50-150				
Perfluorodecanoic acid (PFDA)	3.63	0.197	"	3.94		92.1	50-150				
Perfluoroundecanoic acid (PFUnA)	3.44	0.197	"	3.94		87.4	50-150				
Perfluorododecanoic acid (PFDoA)	3.85	0.197	"	3.94		97.7	50-150				
Perfluorotridecanoic acid (PFTriDA)	3.78	0.197	"	3.94		95.9	50-150				
Perfluorotetradecanoic acid (PFTA)	4.71	0.197	"	3.94		120	50-150				
N-MeFOSAA	3.59	0.197	"	3.94		91.1	50-150				
N-EtFOSAA	4.16	0.197	"	3.94		106	50-150				
Perfluoropentanoic acid (PFPeA)	7.83	0.394	"	7.87		99.4	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	3.87	0.197	"	3.94		98.3	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	3.43	0.197	"	3.76		91.3	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.28	0.190	"	3.80		86.3	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	9.95	0.748	"	15.0		66.5	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	14.9	0.756	"	15.1		98.8	50-150				
Perfluoro-n-butanoic acid (PFBA)	13.3	0.787	"	15.7		84.3	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	5.79	0.350	"	7.01		82.6	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	6.17	0.394	"	7.87		78.4	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	0.894	0.394	"	7.87		11.4	50-150				Low Bias
Perfluoro-5-oxahexanoic acid (PFMBA)	8.95	0.394	"	7.87		114	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	3.67	0.185	"	3.70		99.2	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	11.3	0.738	"	14.8		76.7	50-150				
HFPO-DA (Gen-X)	10.8	0.787	"	7.87		137	50-150				
11CL-PF3OUdS	25.8	0.744	"	7.44		347	50-150				High Bias
9CL-PF3ONS	32.0	0.736	"	7.36		435	50-150				High Bias



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40524 - EPA 1633 Prep

LCS (BG40524-BS1)

Prepared: 07/09/2024 Analyzed: 07/10/2024

ADONA	30.0	0.744	ug/kg wet	7.44		403	50-150	High Bias		
Perfluorododecanesulfonic acid (PFDoS)	3.51	0.191	"	3.82		91.9	50-150			
Perfluoro-1-nonanesulfonic acid (PFNS)	4.01	0.189	"	3.78		106	50-150			
3-Perfluoropropyl propanoic acid (FPrPA)	1.95	0.984	"	15.7		12.4	50-150	Low Bias		
3-Perfluoropentyl propanoic acid (FPePA)	26.5	4.92	"	78.7		33.7	50-150	Low Bias		
3-Perfluoroheptyl propanoic acid (FHpPA)	45.1	4.92	"	78.7		57.3	50-150			
N-MeFOSE	39.7	1.97	"	39.4		101	50-150			
N-MeFOSA	4.41	0.197	"	3.94		112	50-150			
N-EtFOSE	32.4	1.97	"	39.4		82.2	50-150			
N-EtFOSA	7.62	0.197	"	3.94		194	50-150	High Bias		
Surrogate: M3PFBS	2.05		"	2.29		89.5	25-150			
Surrogate: M5PFHxA	2.03		"	2.46		82.4	25-150			
Surrogate: M4PFHpA	2.01		"	2.46		81.6	25-150			
Surrogate: M3PFHxS	2.18		"	2.33		93.4	25-150			
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	2.04		"	2.46		83.0	25-150			
Surrogate: M6PFDA	0.914		"	1.23		74.3	25-150			
Surrogate: M7PFUdA	0.961		"	1.23		78.1	25-150			
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.978		"	1.23		79.5	25-150			
Surrogate: M2PFTeDA	0.943		"	1.23		76.6	10-150			
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.295		"	9.84		3.00	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.76		"	2.36		74.8	25-150			
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.27		"	4.92		66.5	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.58		"	2.46		64.3	10-150			
Surrogate: d3-N-MeFOSAA	3.60		"	4.92		73.1	25-150			
Surrogate: d5-N-EtFOSAA	3.47		"	4.92		70.4	25-150			
Surrogate: M2-6:2 FTS	3.03		"	4.68		64.7	25-200			
Surrogate: M2-8:2 FTS	3.07		"	4.72		65.0	25-200			
Surrogate: M9PFNA	0.964		"	1.23		78.4	25-150			
Surrogate: M2-4:2 FTS	2.30		"	4.62		49.8	25-150			
Surrogate: d-N-MeFOSA	0.687		"	2.46		27.9	25-150			
Surrogate: d-N-EtFOSA	0.697		"	2.46		28.3	25-150			
Surrogate: M3HFPO-DA	1.83		"	9.84		18.6	25-150			
Surrogate: d9-N-EtFOSE	9.17		"	24.6		37.3	25-150			
Surrogate: d7-N-MeFOSE	10.8		"	24.6		43.9	25-150			



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40524 - EPA 1633 Prep

LCS (BG40524-BS2)

Prepared: 07/09/2024 Analyzed: 07/10/2024

Perfluorobutanesulfonic acid (PFBS)	0.692	0.175	ug/kg wet	0.701		98.7	50-150				
Perfluorohexanoic acid (PFHxA)	0.805	0.198	"	0.792		102	50-150				
Perfluoroheptanoic acid (PFHpA)	0.841	0.198	"	0.792		106	50-150				
Perfluorohexanesulfonic acid (PFHxS)	0.825	0.181	"	0.725		114	50-150				
Perfluorooctanoic acid (PFOA)	0.826	0.198	"	0.792		104	50-150				
Perfluorooctanesulfonic acid (PFOS)	0.694	0.184	"	0.737		94.2	50-150				
Perfluorononanoic acid (PFNA)	0.795	0.198	"	0.792		100	50-150				
Perfluorodecanoic acid (PFDA)	0.690	0.198	"	0.792		87.2	50-150				
Perfluoroundecanoic acid (PFUnA)	0.755	0.198	"	0.792		95.4	50-150				
Perfluorododecanoic acid (PFDoA)	0.761	0.198	"	0.792		96.0	50-150				
Perfluorotridecanoic acid (PFTriDA)	1.02	0.198	"	0.792		128	50-150				
Perfluorotetradecanoic acid (PFTA)	0.841	0.198	"	0.792		106	50-150				
N-MeFOSAA	0.822	0.198	"	0.792		104	50-150				
N-EtFOSAA	0.752	0.198	"	0.792		95.0	50-150				
Perfluoropentanoic acid (PFPeA)	1.56	0.396	"	1.58		98.8	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	0.770	0.198	"	0.792		97.2	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	0.693	0.198	"	0.756		91.6	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	0.726	0.191	"	0.764		95.0	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	2.65	0.752	"	3.01		88.1	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	3.25	0.760	"	3.04		107	50-150				
Perfluoro-n-butanoic acid (PFBA)	2.53	0.792	"	3.17		79.7	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	1.18	0.352	"	1.41		83.6	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	1.40	0.396	"	1.58		88.3	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	0.165	0.396	"	1.58		10.4	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	1.78	0.396	"	1.58		113	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	0.786	0.186	"	0.745		106	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	2.34	0.743	"	2.97		78.9	50-150				
HFPO-DA (Gen-X)	1.77	0.792	"	1.58		112	50-150				
11CL-PF3OUdS	1.40	0.749	"	1.50		93.7	50-150				
9CL-PF3ONS	1.96	0.741	"	1.48		132	50-150				
ADONA	1.99	0.749	"	1.50		133	50-150				
Perfluorododecanesulfonic acid (PFDoS)	0.447	0.192	"	0.768		58.1	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	0.835	0.190	"	0.760		110	50-150				
3-Perfluoropropyl propanoic acid (FPPrPA)	0.856	0.990	"	3.17		27.0	50-150	Low Bias			
3-Perfluoropentyl propanoic acid (FPePA)	8.79	4.95	"	15.8		55.5	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	12.8	4.95	"	15.8		80.8	50-150				
N-MeFOSE	7.64	1.98	"	7.92		96.5	50-150				
N-MeFOSA	0.610	0.198	"	0.792		77.1	50-150				
N-EtFOSE	8.04	1.98	"	7.92		101	50-150				
N-EtFOSA	0.820	0.198	"	0.792		104	50-150				
Surrogate: M3PFBS	1.83		"	2.31		79.1	25-150				
Surrogate: M5PFHxA	2.19		"	2.48		88.4	25-150				
Surrogate: M4PFHpA	2.12		"	2.48		85.4	25-150				
Surrogate: M3PFHxS	1.97		"	2.35		84.2	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	1.93		"	2.48		77.9	25-150				
Surrogate: M6PFDA	1.04		"	1.24		83.9	25-150				
Surrogate: M7PFUdA	0.853		"	1.24		68.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	0.702		"	1.24		56.7	25-150				
Surrogate: M2PFTeDA	0.427		"	1.24		34.5	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40524 - EPA 1633 Prep

LCS (BG40524-BS2)

Prepared: 07/09/2024 Analyzed: 07/10/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	0.310		ug/kg wet	9.90		3.13	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	1.88		"	2.37		79.4	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	3.37		"	4.95		68.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.51		"	2.48		61.1	10-150				
Surrogate: d3-N-MeFOSAA	4.74		"	4.95		95.7	25-150				
Surrogate: d5-N-EtFOSAA	4.91		"	4.95		99.2	25-150				
Surrogate: M2-6:2 FTS	3.05		"	4.71		64.8	25-200				
Surrogate: M2-8:2 FTS	5.94		"	4.75		125	25-200				
Surrogate: M9PFNA	1.01		"	1.24		81.8	25-150				
Surrogate: M2-4:2 FTS	2.05		"	4.64		44.2	25-150				
Surrogate: d-N-MeFOSA	0.957		"	2.48		38.7	25-150				
Surrogate: d-N-EtFOSA	0.512		"	2.48		20.7	25-150				
Surrogate: M3HFPO-DA	5.89		"	9.90		59.5	25-150				
Surrogate: d9-N-EtFOSE	5.07		"	24.8		20.5	25-150				
Surrogate: d7-N-MeFOSE	8.67		"	24.8		35.0	25-150				

Batch BG40777 - EPA 1633 Prep

Blank (BG40777-BLK1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.53	ng/L
Perfluorohexanoic acid (PFHxA)	ND	3.99	"
Perfluoroheptanoic acid (PFHpA)	ND	3.99	"
Perfluorohexanesulfonic acid (PFHxS)	ND	3.65	"
Perfluorooctanoic acid (PFOA)	ND	3.99	"
Perfluorooctanesulfonic acid (PFOS)	ND	3.71	"
Perfluorononanoic acid (PFNA)	ND	3.99	"
Perfluorodecanoic acid (PFDA)	ND	3.99	"
Perfluoroundecanoic acid (PFUnA)	ND	3.99	"
Perfluorododecanoic acid (PFDoA)	ND	3.99	"
Perfluorotridecanoic acid (PFTTrDA)	ND	3.99	"
Perfluorotetradecanoic acid (PFTA)	ND	3.99	"
N-MeFOSAA	ND	3.99	"
N-EtFOSAA	ND	3.99	"
Perfluoropentanoic acid (PFPeA)	ND	7.99	"
Perfluoro-1-octanesulfonamide (FOSA)	ND	3.99	"
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.81	"
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.85	"
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.3	"
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	7.11	"
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	7.99	"
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	7.99	"
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	7.99	"
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.75	"
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"
HFPO-DA (Gen-X)	ND	16.0	"
11CL-PF3OUdS	ND	15.1	"



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40777 - EPA 1633 Prep

Blank (BG40777-BLK1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

9CL-PF3ONS	ND	14.9	ng/L								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.87	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.83	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	9.98	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	49.9	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	49.9	"								
N-MeFOSE	ND	39.9	"								
N-MeFOSA	ND	3.99	"								
N-EtFOSE	ND	39.9	"								
N-EtFOSA	ND	3.99	"								
Surrogate: M3PFBS	58.7		"	46.5		126	25-150				
Surrogate: M5PFHxA	66.5		"	49.9		133	25-150				
Surrogate: M4PFHpA	76.5		"	49.9		153	25-150				
Surrogate: M3PFHxS	60.0		"	47.3		127	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	65.6		"	49.9		131	25-150				
Surrogate: M6PFDA	29.5		"	25.0		118	25-150				
Surrogate: M7PFUdA	32.7		"	25.0		131	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	27.8		"	25.0		111	25-150				
Surrogate: M2PFTeDA	18.6		"	25.0		74.4	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	84.0		"	200		42.1	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	58.8		"	47.8		123	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	126		"	99.8		126	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	58.1		"	49.9		116	10-150				
Surrogate: d3-N-MeFOSAA	141		"	99.8		141	25-150				
Surrogate: d5-N-EtFOSAA	143		"	99.8		143	25-150				
Surrogate: M2-6:2 FTS	89.8		"	94.9		94.6	25-200				
Surrogate: M2-8:2 FTS	107		"	95.8		111	25-200				
Surrogate: M9PFNA	34.8		"	25.0		139	25-150				
Surrogate: M2-4:2 FTS	70.8		"	93.7		75.6	25-150				
Surrogate: d-N-MeFOSA	58.5		"	49.9		117	25-150				
Surrogate: d-N-EtFOSA	41.6		"	49.9		83.3	25-150				
Surrogate: M3HFPO-DA	287		"	200		144	25-150				
Surrogate: d9-N-EtFOSE	447		"	499		89.6	25-150				
Surrogate: d7-N-MeFOSE	532		"	499		107	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40777 - EPA 1633 Prep

Blank (BG40777-BLK2)

Prepared: 07/11/2024 Analyzed: 07/13/2024

Perfluorobutanesulfonic acid (PFBS)	ND	1.58	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	1.79	"								
Perfluoroheptanoic acid (PFHpA)	ND	1.79	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.64	"								
Perfluorooctanoic acid (PFOA)	ND	1.79	"								
Perfluorooctanesulfonic acid (PFOS)	ND	1.66	"								
Perfluorononanoic acid (PFNA)	ND	1.79	"								
Perfluorodecanoic acid (PFDA)	ND	1.79	"								
Perfluoroundecanoic acid (PFUnA)	ND	1.79	"								
Perfluorododecanoic acid (PFDoA)	ND	1.79	"								
Perfluorotridecanoic acid (PFTrDA)	ND	1.79	"								
Perfluorotetradecanoic acid (PFTA)	ND	1.79	"								
N-MeFOSAA	ND	1.79	"								
N-EtFOSAA	ND	1.79	"								
Perfluoropentanoic acid (PFPeA)	ND	3.58	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	1.79	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.71	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.73	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	6.80	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	6.87	"								
Perfluoro-n-butanoic acid (PFBA)	ND	7.15	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND	3.18	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	3.58	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	3.58	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	3.58	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.68	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	6.71	"								
HFPO-DA (Gen-X)	ND	7.15	"								
11CL-PF3OUdS	ND	6.76	"								
9CL-PF3ONS	ND	6.69	"								
ADONA	ND	6.76	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	1.73	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	1.72	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	4.47	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	22.4	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	22.4	"								
N-MeFOSE	ND	17.9	"								
N-MeFOSA	ND	1.79	"								
N-EtFOSE	ND	17.9	"								
N-EtFOSA	ND	1.79	"								
Surrogate: M3PFBS	32.9		"	20.8		158	25-150				
Surrogate: M5PFHxA	31.3		"	22.4		140	25-150				
Surrogate: M4PFHpA	38.2		"	22.4		171	25-150				
Surrogate: M3PFHxS	33.8		"	21.2		159	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	31.0		"	22.4		139	25-150				
Surrogate: M6PFDA	15.9		"	11.2		143	25-150				
Surrogate: M7PFUdA	17.3		"	11.2		155	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	12.7		"	11.2		114	25-150				
Surrogate: M2PFTEdA	9.47		"	11.2		84.7	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40777 - EPA 1633 Prep

Blank (BG40777-BLK2)

Prepared: 07/11/2024 Analyzed: 07/13/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	13.7		ng/L	89.4		15.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	28.7		"	21.4		134	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	54.8		"	44.7		122	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	29.1		"	22.4		130	10-150				
Surrogate: d3-N-MeFOSAA	60.6		"	44.7		135	25-150				
Surrogate: d5-N-EtFOSAA	67.3		"	44.7		151	25-150				
Surrogate: M2-6:2 FTS	52.5		"	42.5		123	25-200				
Surrogate: M2-8:2 FTS	53.7		"	42.9		125	25-200				
Surrogate: M9PFNA	15.3		"	11.2		137	25-150				
Surrogate: M2-4:2 FTS	50.6		"	41.9		121	25-150				
Surrogate: d-N-MeFOSA	25.4		"	22.4		114	25-150				
Surrogate: d-N-EtFOSA	16.6		"	22.4		74.3	25-150				
Surrogate: M3HFPO-DA	128		"	89.4		143	25-150				
Surrogate: d9-N-EtFOSE	163		"	224		72.9	25-150				
Surrogate: d7-N-MeFOSE	190		"	224		84.9	25-150				

LCS (BG40777-BS1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

Perfluorobutanesulfonic acid (PFBS)	71.9	3.54	ng/L	70.8		102	50-150				
Perfluorohexanoic acid (PFHxA)	80.6	4.00	"	80.0		101	50-150				
Perfluoroheptanoic acid (PFHpA)	90.4	4.00	"	80.0		113	50-150				
Perfluorohexanesulfonic acid (PFHxS)	74.5	3.66	"	73.2		102	50-150				
Perfluorooctanoic acid (PFOA)	90.2	4.00	"	80.0		113	50-150				
Perfluorooctanesulfonic acid (PFOS)	64.3	3.72	"	74.4		86.4	50-150				
Perfluorononanoic acid (PFNA)	83.5	4.00	"	80.0		104	50-150				
Perfluorodecanoic acid (PFDA)	89.8	4.00	"	80.0		112	50-150				
Perfluoroundecanoic acid (PFUnA)	61.4	4.00	"	80.0		76.7	50-150				
Perfluorododecanoic acid (PFDoA)	84.4	4.00	"	80.0		105	50-150				
Perfluorotridecanoic acid (PFTTrDA)	100	4.00	"	80.0		125	50-150				
Perfluorotetradecanoic acid (PFTA)	88.0	4.00	"	80.0		110	50-150				
N-MeFOSAA	72.3	4.00	"	80.0		90.4	50-150				
N-EtFOSAA	83.6	4.00	"	80.0		105	50-150				
Perfluoropentanoic acid (PFPeA)	157	8.00	"	160		98.4	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	82.4	4.00	"	80.0		103	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	65.6	3.82	"	76.4		85.9	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	65.1	3.86	"	77.2		84.4	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	203	15.2	"	304		66.9	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	252	15.4	"	307		82.2	50-150				
Perfluoro-n-butanoic acid (PFBA)	308	16.0	"	320		96.1	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	128	7.12	"	142		90.2	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	144	8.00	"	160		89.8	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	64.2	8.00	"	160		40.1	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	167	8.00	"	160		104	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	72.5	3.76	"	75.2		96.4	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	262	15.0	"	300		87.3	50-150				
HFPO-DA (Gen-X)	160	16.0	"	160		99.8	50-150				
11CL-PF3OUdS	130	15.1	"	151		86.0	50-150				
9CL-PF3ONS	148	15.0	"	150		98.9	50-150				
ADONA	150	15.1	"	151		99.1	50-150				

Low Bias



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40777 - EPA 1633 Prep

LCS (BG40777-BS1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

Perfluorododecanesulfonic acid (PFDoS)	56.0	3.88	ng/L	77.6		72.2	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	76.0	3.84	"	76.8		98.9	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	213	10.0	"	320		66.5	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1290	50.0	"	1600		80.6	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1480	50.0	"	1600		92.6	50-150				
N-MeFOSE	811	40.0	"	800		101	50-150				
N-MeFOSA	77.0	4.00	"	80.0		96.2	50-150				
N-EtFOSE	685	40.0	"	800		85.6	50-150				
N-EtFOSA	81.5	4.00	"	80.0		102	50-150				
Surrogate: M3PFBS	54.8		"	46.6		118	25-150				
Surrogate: M5PFHxA	61.5		"	50.0		123	25-150				
Surrogate: M4PFHpA	71.0		"	50.0		142	25-150				
Surrogate: M3PFHxS	58.5		"	47.4		123	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	64.7		"	50.0		129	25-150				
Surrogate: M6PFDA	29.0		"	25.0		116	25-150				
Surrogate: M7PFUdA	33.8		"	25.0		135	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	27.9		"	25.0		112	25-150				
Surrogate: M2PFTeDA	19.3		"	25.0		77.3	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	37.1		"	200		18.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	64.3		"	47.9		134	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	104		"	100		104	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	60.6		"	50.0		121	10-150				
Surrogate: d3-N-MeFOSAA	139		"	100		139	25-150				
Surrogate: d5-N-EtFOSAA	146		"	100		146	25-150				
Surrogate: M2-6:2 FTS	106		"	95.1		112	25-200				
Surrogate: M2-8:2 FTS	112		"	96.0		116	25-200				
Surrogate: M9PFNA	33.6		"	25.0		134	25-150				
Surrogate: M2-4:2 FTS	81.6		"	93.8		87.1	25-150				
Surrogate: d-N-MeFOSA	57.4		"	50.0		115	25-150				
Surrogate: d-N-EtFOSA	48.4		"	50.0		96.7	25-150				
Surrogate: M3HFPO-DA	267		"	200		133	25-150				
Surrogate: d9-N-EtFOSE	511		"	500		102	25-150				
Surrogate: d7-N-MeFOSE	573		"	500		115	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag

Batch BG40777 - EPA 1633 Prep

LCS (BG40777-BS2)

Prepared: 07/11/2024 Analyzed: 07/12/2024

Perfluorobutanesulfonic acid (PFBS)	13.0	3.54	ng/L	14.2		91.8	50-150				
Perfluorohexanoic acid (PFHxA)	15.7	4.00	"	16.0		98.3	50-150				
Perfluoroheptanoic acid (PFHpA)	18.2	4.00	"	16.0		114	50-150				
Perfluorohexanesulfonic acid (PFHxS)	15.2	3.66	"	14.6		104	50-150				
Perfluorooctanoic acid (PFOA)	19.0	4.00	"	16.0		119	50-150				
Perfluorooctanesulfonic acid (PFOS)	16.1	3.72	"	14.9		108	50-150				
Perfluorononanoic acid (PFNA)	16.4	4.00	"	16.0		102	50-150				
Perfluorodecanoic acid (PFDA)	17.9	4.00	"	16.0		112	50-150				
Perfluoroundecanoic acid (PFUnA)	13.3	4.00	"	16.0		83.0	50-150				
Perfluorododecanoic acid (PFDoA)	15.8	4.00	"	16.0		98.6	50-150				
Perfluorotridecanoic acid (PFTriDA)	20.2	4.00	"	16.0		127	50-150				
Perfluorotetradecanoic acid (PFTA)	15.7	4.00	"	16.0		98.3	50-150				
N-MeFOSAA	15.1	4.00	"	16.0		94.2	50-150				
N-EtFOSAA	16.9	4.00	"	16.0		106	50-150				
Perfluoropentanoic acid (PFPeA)	29.6	8.00	"	32.0		92.7	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	16.9	4.00	"	16.0		106	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	13.3	3.82	"	15.3		86.8	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	14.0	3.86	"	15.4		90.8	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	50.8	15.2	"	60.8		83.6	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	60.0	15.4	"	61.4		97.7	50-150				
Perfluoro-n-butanoic acid (PFBA)	59.6	16.0	"	64.0		93.2	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	25.0	7.12	"	28.5		87.9	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	24.7	8.00	"	32.0		77.1	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	11.0	8.00	"	32.0		34.4	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	34.5	8.00	"	32.0		108	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	14.2	3.76	"	15.0		94.4	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	51.6	15.0	"	60.0		86.1	50-150				
HFPO-DA (Gen-X)	33.4	16.0	"	32.0		105	50-150				
11CL-PF3OUdS	26.3	15.1	"	30.2		86.8	50-150				
9CL-PF3ONS	31.2	15.0	"	29.9		104	50-150				
ADONA	30.6	15.1	"	30.2		101	50-150				
Perfluorododecanesulfonic acid (PFDoS)	11.8	3.88	"	15.5		75.8	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	15.0	3.84	"	15.4		97.8	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	41.7	10.0	"	64.0		65.2	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	240	50.0	"	320		75.1	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	299	50.0	"	320		93.4	50-150				
N-MeFOSE	149	40.0	"	160		92.9	50-150				
N-MeFOSA	15.0	4.00	"	16.0		93.9	50-150				
N-EtFOSE	149	40.0	"	160		93.1	50-150				
N-EtFOSA	18.1	4.00	"	16.0		113	50-150				
Surrogate: M3PFBS	61.6		"	46.6		132	25-150				
Surrogate: M5PFHxA	66.6		"	50.0		133	25-150				
Surrogate: M4PFHpA	76.2		"	50.0		152	25-150				
Surrogate: M3PFHxS	65.9		"	47.4		139	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	60.0		"	50.0		120	25-150				
Surrogate: M6PFDA	29.0		"	25.0		116	25-150				
Surrogate: M7PFUdA	34.9		"	25.0		140	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	29.6		"	25.0		118	25-150				
Surrogate: M2PFTeDA	21.7		"	25.0		86.8	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40777 - EPA 1633 Prep

LCS (BG40777-BS2)

Prepared: 07/11/2024 Analyzed: 07/12/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	29.6		ng/L	200		14.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	63.7		"	47.9		133	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	104		"	100		104	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	60.7		"	50.0		122	10-150				
Surrogate: d3-N-MeFOSAA	145		"	100		145	25-150				
Surrogate: d5-N-EtFOSAA	152		"	100		152	25-150				
Surrogate: M2-6:2 FTS	88.1		"	95.1		92.7	25-200				
Surrogate: M2-8:2 FTS	106		"	96.0		110	25-200				
Surrogate: M9PFNA	36.0		"	25.0		144	25-150				
Surrogate: M2-4:2 FTS	85.2		"	93.8		90.9	25-150				
Surrogate: d-N-MeFOSA	60.1		"	50.0		120	25-150				
Surrogate: d-N-EtFOSA	48.1		"	50.0		96.2	25-150				
Surrogate: M3HFPO-DA	276		"	200		138	25-150				
Surrogate: d9-N-EtFOSE	510		"	500		102	25-150				
Surrogate: d7-N-MeFOSE	653		"	500		131	25-150				

Batch BG41586 - EPA 1633 Prep

Blank (BG41586-BLK1)

Prepared: 07/24/2024 Analyzed: 07/29/2024

Perfluorobutanesulfonic acid (PFBS)	ND	0.176	ug/kg wet
Perfluorohexanoic acid (PFHxA)	ND	0.199	"
Perfluoroheptanoic acid (PFHpA)	ND	0.199	"
Perfluorohexanesulfonic acid (PFHxS)	ND	0.182	"
Perfluorooctanoic acid (PFOA)	ND	0.199	"
Perfluorooctanesulfonic acid (PFOS)	ND	0.185	"
Perfluorononanoic acid (PFNA)	ND	0.199	"
Perfluorodecanoic acid (PFDA)	ND	0.199	"
Perfluoroundecanoic acid (PFUnA)	ND	0.199	"
Perfluorododecanoic acid (PFDoA)	ND	0.199	"
Perfluorotridecanoic acid (PFTTrDA)	ND	0.199	"
Perfluorotetradecanoic acid (PFTA)	ND	0.199	"
N-MeFOSAA	ND	0.199	"
N-EtFOSAA	ND	0.199	"
Perfluoropentanoic acid (PFPeA)	ND	0.398	"
Perfluoro-1-octanesulfonamide (FOSA)	ND	0.199	"
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	0.199	"
Perfluoro-1-decanesulfonic acid (PFDS)	ND	0.192	"
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	0.755	"
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	0.763	"
Perfluoro-n-butanoic acid (PFBA)	ND	0.795	"
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	0.354	"
Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.398	"
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	0.398	"
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	0.398	"
Perfluoro-1-pentanesulfonate (PFPeS)	ND	0.187	"
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	0.746	"
HFPO-DA (Gen-X)	ND	0.795	"
11CL-PF3OUdS	ND	0.751	"



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41586 - EPA 1633 Prep

Blank (BG41586-BLK1)

Prepared: 07/24/2024 Analyzed: 07/29/2024

9CL-PF3ONS	ND	0.744	ug/kg wet							
ADONA	ND	0.751	"							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.193	"							
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	0.191	"							
3-Perfluoropropyl propanoic acid (FPrPA)	ND	0.994	"							
3-Perfluoropentyl propanoic acid (FPePA)	ND	4.97	"							
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	4.97	"							
N-MeFOSE	ND	1.99	"							
N-MeFOSA	ND	0.199	"							
N-EtFOSE	ND	1.99	"							
N-EtFOSA	ND	0.199	"							
Surrogate: M3PFBS	2.65		"	2.32		114	25-150			
Surrogate: M5PFHxA	2.89		"	2.49		116	25-150			
Surrogate: M4PFHpA	2.92		"	2.49		118	25-150			
Surrogate: M3PFHxS	2.61		"	2.36		111	25-150			
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	2.62		"	2.49		105	25-150			
Surrogate: M6PFDA	1.22		"	1.24		98.2	25-150			
Surrogate: M7PFUdA	1.40		"	1.24		112	25-150			
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	1.47		"	1.24		118	25-150			
Surrogate: M2PFTeDA	1.31		"	1.24		106	10-150			
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	2.17		"	9.94		21.9	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	2.15		"	2.38		90.3	25-150			
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	6.47		"	4.97		130	25-150			
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.43		"	2.49		57.6	10-150			
Surrogate: d3-N-MeFOSAA	2.87		"	4.97		57.7	25-150			
Surrogate: d5-N-EtFOSAA	3.12		"	4.97		62.8	25-150			
Surrogate: M2-6:2 FTS	1.60		"	4.73		33.8	25-200			
Surrogate: M2-8:2 FTS	1.63		"	4.77		34.2	25-200			
Surrogate: M9PFNA	1.23		"	1.24		99.2	25-150			
Surrogate: M2-4:2 FTS	2.18		"	4.66		46.8	25-150			
Surrogate: d-N-MeFOSA	0.372		"	2.49		15.0	25-150			
Surrogate: d-N-EtFOSA	0.727		"	2.49		29.3	25-150			
Surrogate: M3HFPO-DA	4.10		"	9.94		41.3	25-150			
Surrogate: d9-N-EtFOSE	13.7		"	24.9		55.0	25-150			
Surrogate: d7-N-MeFOSE	14.2		"	24.9		57.3	25-150			



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41586 - EPA 1633 Prep

LCS (BG41586-BS1)

Prepared: 07/24/2024 Analyzed: 07/29/2024

Perfluorobutanesulfonic acid (PFBS)	3.85	0.176	ug/kg wet	3.52		109	50-150				
Perfluorohexanoic acid (PFHxA)	3.77	0.199	"	3.98		94.8	50-150				
Perfluoroheptanoic acid (PFHpA)	3.98	0.199	"	3.98		100	50-150				
Perfluorohexanesulfonic acid (PFHxS)	3.61	0.182	"	3.64		99.3	50-150				
Perfluorooctanoic acid (PFOA)	3.42	0.199	"	3.98		85.9	50-150				
Perfluorooctanesulfonic acid (PFOS)	3.75	0.185	"	3.70		102	50-150				
Perfluorononanoic acid (PFNA)	3.88	0.199	"	3.98		97.5	50-150				
Perfluorodecanoic acid (PFDA)	4.02	0.199	"	3.98		101	50-150				
Perfluoroundecanoic acid (PFUnA)	4.37	0.199	"	3.98		110	50-150				
Perfluorododecanoic acid (PFDoA)	3.84	0.199	"	3.98		96.5	50-150				
Perfluorotridecanoic acid (PFTrDA)	3.72	0.199	"	3.98		93.7	50-150				
Perfluorotetradecanoic acid (PFTA)	3.54	0.199	"	3.98		88.9	50-150				
N-MeFOSAA	4.46	0.199	"	3.98		112	50-150				
N-EtFOSAA	3.97	0.199	"	3.98		99.9	50-150				
Perfluoropentanoic acid (PFPeA)	7.82	0.398	"	7.95		98.3	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	4.23	0.199	"	3.98		106	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	3.84	0.199	"	3.80		101	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.39	0.192	"	3.84		88.3	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	14.4	0.755	"	15.1		95.3	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	14.3	0.763	"	15.3		93.5	50-150				
Perfluoro-n-butanoic acid (PFBA)	15.6	0.795	"	15.9		97.9	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	8.05	0.354	"	7.08		114	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	6.14	0.398	"	7.95		77.2	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	3.10	0.398	"	7.95		39.0	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	7.71	0.398	"	7.95		97.0	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	4.19	0.187	"	3.74		112	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	15.0	0.746	"	14.9		101	50-150				
HFPO-DA (Gen-X)	11.7	0.795	"	7.95		147	50-150				
11CL-PF3OUdS	19.3	0.751	"	7.51		257	50-150	High Bias			
9CL-PF3ONS	24.0	0.744	"	7.44		323	50-150	High Bias			
ADONA	24.3	0.751	"	7.51		324	50-150	High Bias			
Perfluorododecanesulfonic acid (PFDoS)	2.65	0.193	"	3.86		68.6	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	3.88	0.191	"	3.82		102	50-150				
3-Perfluoropropyl propanoic acid (FPPrPA)	2.81	0.994	"	15.9		17.7	50-150	Low Bias			
3-Perfluoropentyl propanoic acid (FPePA)	34.4	4.97	"	79.5		43.2	50-150	Low Bias			
3-Perfluoroheptyl propanoic acid (FHpPA)	35.7	4.97	"	79.5		44.9	50-150	Low Bias			
N-MeFOSE	42.8	1.99	"	39.8		108	50-150				
N-MeFOSA	3.88	0.199	"	3.98		97.5	50-150				
N-EtFOSE	37.9	1.99	"	39.8		95.3	50-150				
N-EtFOSA	2.80	0.199	"	3.98		70.4	50-150				
Surrogate: M3PFBS	2.42		"	2.32		105	25-150				
Surrogate: M5PFHxA	3.02		"	2.49		121	25-150				
Surrogate: M4PFHpA	2.91		"	2.49		117	25-150				
Surrogate: M3PFHxS	2.55		"	2.36		108	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.04		"	2.49		122	25-150				
Surrogate: M6PFDA	1.11		"	1.24		89.2	25-150				
Surrogate: M7PFUdA	1.24		"	1.24		99.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	1.16		"	1.24		93.2	25-150				
Surrogate: M2PFTeDA	1.19		"	1.24		95.8	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41586 - EPA 1633 Prep

LCS (BG41586-BS1)

Prepared: 07/24/2024 Analyzed: 07/29/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	1.45		ug/kg wet	9.94		14.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	2.12		"	2.38		89.2	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	6.61		"	4.97		133	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	1.42		"	2.49		57.1	10-150				
Surrogate: d3-N-MeFOSAA	2.71		"	4.97		54.6	25-150				
Surrogate: d5-N-EtFOSAA	3.16		"	4.97		63.6	25-150				
Surrogate: M2-6:2 FTS	1.83		"	4.73		38.6	25-200				
Surrogate: M2-8:2 FTS	1.85		"	4.77		38.8	25-200				
Surrogate: M9PFNA	1.25		"	1.24		101	25-150				
Surrogate: M2-4:2 FTS	2.38		"	4.66		51.0	25-150				
Surrogate: d-N-MeFOSA	0.492		"	2.49		19.8	25-150				
Surrogate: d-N-EtFOSA	0.766		"	2.49		30.8	25-150				
Surrogate: M3HFPO-DA	3.76		"	9.94		37.9	25-150				
Surrogate: d9-N-EtFOSE	12.9		"	24.9		52.1	25-150				
Surrogate: d7-N-MeFOSE	13.5		"	24.9		54.5	25-150				

LCS (BG41586-BS2)

Prepared: 07/24/2024 Analyzed: 07/30/2024

Perfluorobutanesulfonic acid (PFBS)	0.692	0.176	ug/kg wet	0.705		98.1	50-150				
Perfluorohexanoic acid (PFHxA)	0.689	0.199	"	0.797		86.5	50-150				
Perfluoroheptanoic acid (PFHpA)	0.792	0.199	"	0.797		99.3	50-150				
Perfluorohexanesulfonic acid (PFHxS)	0.722	0.182	"	0.729		99.1	50-150				
Perfluorooctanoic acid (PFOA)	0.616	0.199	"	0.797		77.3	50-150				
Perfluorooctanesulfonic acid (PFOS)	0.814	0.185	"	0.741		110	50-150				
Perfluorononanoic acid (PFNA)	0.757	0.199	"	0.797		95.0	50-150				
Perfluorodecanoic acid (PFDA)	0.821	0.199	"	0.797		103	50-150				
Perfluoroundecanoic acid (PFUnA)	0.765	0.199	"	0.797		96.0	50-150				
Perfluorododecanoic acid (PFDoA)	0.696	0.199	"	0.797		87.4	50-150				
Perfluorotridecanoic acid (PFTTrDA)	0.798	0.199	"	0.797		100	50-150				
Perfluorotetradecanoic acid (PFTA)	0.590	0.199	"	0.797		74.0	50-150				
N-MeFOSAA	0.826	0.199	"	0.797		104	50-150				
N-EtFOSAA	0.596	0.199	"	0.797		74.8	50-150				
Perfluoropentanoic acid (PFPeA)	1.49	0.398	"	1.59		93.5	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	0.827	0.199	"	0.797		104	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	0.814	0.199	"	0.761		107	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	0.604	0.192	"	0.769		78.6	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	2.69	0.757	"	3.03		89.0	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	3.19	0.765	"	3.06		104	50-150				
Perfluoro-n-butanoic acid (PFBA)	3.09	0.797	"	3.19		96.9	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	1.59	0.355	"	1.42		112	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	1.08	0.398	"	1.59		67.8	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	1.10	0.398	"	1.59		68.9	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	1.45	0.398	"	1.59		90.9	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	0.815	0.187	"	0.749		109	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	2.68	0.747	"	2.99		89.8	50-150				
HFPO-DA (Gen-X)	0.739	0.797	"	1.59		46.4	50-150	Low Bias			
11CL-PF3OUdS	0.892	0.753	"	1.51		59.2	50-150				
9CL-PF3ONS	0.984	0.745	"	1.49		66.0	50-150				
ADONA	1.27	0.753	"	1.51		84.2	50-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41586 - EPA 1633 Prep

LCS (BG41586-BS2)

Prepared: 07/24/2024 Analyzed: 07/30/2024

Perfluorododecanesulfonic acid (PFDoS)	0.398	0.193	ug/kg wet	0.773		51.5	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	0.663	0.191	"	0.765		86.7	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	2.78	0.996	"	3.19		87.4	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	13.9	4.98	"	15.9		87.5	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	10.2	4.98	"	15.9		63.9	50-150				
N-MeFOSE	7.87	1.99	"	7.97		98.7	50-150				
N-MeFOSA	0.883	0.199	"	0.797		111	50-150				
N-EtFOSE	7.70	1.99	"	7.97		96.6	50-150				
N-EtFOSA	1.29	0.199	"	0.797		162	50-150	High Bias			
Surrogate: M3PFBS	3.06		"	2.32		132	25-150				
Surrogate: M5PFHxA	3.18		"	2.49		128	25-150				
Surrogate: M4PFHpA	2.96		"	2.49		119	25-150				
Surrogate: M3PFHxS	2.71		"	2.36		115	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	3.22		"	2.49		129	25-150				
Surrogate: M6PFDA	1.09		"	1.25		87.9	25-150				
Surrogate: M7PFUdA	1.31		"	1.25		105	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	1.02		"	1.25		82.3	25-150				
Surrogate: M2PFTeDA	0.804		"	1.25		64.6	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	7.20		"	9.96		72.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	2.36		"	2.39		98.7	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	6.05		"	4.98		121	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	2.17		"	2.49		87.2	10-150				
Surrogate: d3-N-MeFOSAA	3.92		"	4.98		78.7	25-150				
Surrogate: d5-N-EtFOSAA	4.78		"	4.98		96.1	25-150				
Surrogate: M2-6:2 FTS	7.32		"	4.74		155	25-200				
Surrogate: M2-8:2 FTS	5.46		"	4.78		114	25-200				
Surrogate: M9PFNA	1.31		"	1.25		106	25-150				
Surrogate: M2-4:2 FTS	11.1		"	4.67		237	25-150				
Surrogate: d-N-MeFOSA	1.53		"	2.49		61.5	25-150				
Surrogate: d-N-EtFOSA	1.01		"	2.49		40.6	25-150				
Surrogate: M3HFPO-DA	14.3		"	9.96		144	25-150				
Surrogate: d9-N-EtFOSE	17.9		"	24.9		72.1	25-150				
Surrogate: d7-N-MeFOSE	20.3		"	24.9		81.6	25-150				



Miscellaneous Physical Parameters - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag

Batch BG40702 - % Solids Prep

Duplicate (BG40702-DUP1)	*Source sample: 24G0112-04 (VHB-SB-14 (1-1.8ft))						Prepared & Analyzed: 07/11/2024				
% Solids	87.9	0.100	%		87.1			0.917	20		

Batch BG41588 - % Solids Prep

Duplicate (BG41588-DUP1)	*Source sample: 24G0112-09 (VHB-SB-16 (6-7.9ft))						Prepared & Analyzed: 07/25/2024				
% Solids	80.1	0.100	%		77.9			2.87	20		



Sample and Data Qualifiers Relating to This Work Order

PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Corrective Action: Sample activations received by client 7/2/24 after samples were picked up. An updated COC was provided.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This legal document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 2161 Whitesville Rd Toms River, NJ 08755 client-services@yorklab.com 800-306-YORK

Report To:		Invoice To:		YOUR Project Name / Number		Samples Collected From		Turn-Around Time				
Company:	Address:	Company:	Address:	NY	CT	PA	Other: (please specify)	RUSH - Next Day				
YORK	100 Great Meadow Road, Suite 200	YORK	Hempstead Park / 43340					RUSH - Two Day				
Phone:	860 807 4303	Phone:						RUSH - Three Day				
Contact:	Paula Lindy Neal Hulstian	Contact:						RUSH - Four Day				
E-mail:	plindy@yorklab.com, nhulstian@yorklab.com	E-mail:						RUSH - Five Day				
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.				Analyses Requested				Standard (6-9 Day)				
Neal Hulstian Neal Hulstian				PO Number				PFAS Standard 7-10 Day				
Samples Collected by: (print AND sign your name)				Preservative (please list number of containers)				Report Type (circle)				
Sample Identification	Date	Time	Matrix	HCl (hydrochloric acid)	MeOH (methanol)	HNO ₃ (nitric acid)	H ₂ SO ₄ (sulfuric acid)	NaOH (sodium hydroxide)	Na ₂ SO ₃ (sodium thio.)	Trizma	Ammonium Acetate	Other:
VHB-SB-13 (2.2-2.8)	7/1/21	9:40	S									
VHB-SB-13 (5-6.8)		9:45										
VHB-SB-13 (8-9)		9:50										
VHB-SB-14 (1-1.8)		10:25										
VHB-SB-14 (5-5.7)		10:36										
VHB-SB-14 (5.7-6.7)		10:35										
VHB-SB-15 (0-1)		11:00										
VHB-SB-16 (2-2.8)		11:10										
VHB-SB-16 (5-7.9)		11:15										
VHB-SB-16 (10-12)		11:20										
VHB-SB-17 (0-1.4)		11:30										
VHB-SB-17 (1.4-2.1)		11:35										
VHB-SB-17 (5.3-5.6)		11:40										
VHB-SB-18 (1-1.8)		11:50										
VHB-SB-18 (1.8-2.8)		11:55										

Comments:		Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N	
		Custody Seals: Y / N	Containers Intact: Y / N
		COC Labels Agree: Y / N <td>Preservation Confirmed: Y / N</td>	Preservation Confirmed: Y / N
		COC Complete: Y / N	Appropriate Sample Volumes: Y / N
		COC Temperature Confirmed: Y / N	Appropriate Sample Containers: Y / N
		Cooler Temperature Confirmed: Y / N	Corrective Action Form Required: Y / N

Samples Relinquished by / Company		Samples Received by / Company	
Date/Time	Signature	Date/Time	Signature
7/1/21 16:30	Neal Hulstian	7/1/21 16:30	YHB
1. Samples Relinquished by / Company		2. Samples Relinquished by / Company	
3. Samples Relinquished by / Company		3. Samples Received by / Company	
4. Samples Relinquished by / Company		4. Samples Received by / Company	

No tax - work is for City of New London

Field Chain-of-Custody Record



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YORK Project Number

Page 2 of 2

Report To: Company: VHB Address: 100 Great Meadow Road Suite 200 Phone: 860 807 4303 Contact: Pam Lindy, Neal Holstein E-mail: plindy@vhb.com; nholstein@vhb.com AP-CT-02 jhb-ean		Invoice To: Company: " " Address: " " Phone: " " Contact: " " E-mail: " "		YOUR Project Name / Number Hampstead Park / 43540		Samples Collected From NY CT PA Other (please specify) NY NJ		Turn-Around Time RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day RUSH - Five Day Standard (6-9 Day) PFAS Standard 7-10 Day	
Preservative (please list number of containers)		Matrix Codes S - soil/solid/sludge GW - groundwater DW - drinking water SW - surface water WW - wastewater O - Oil Other		PO Number		Analyses Requested		Report Type (circle) TOA Report Summary (Results Only) NY ASP B Package NJ Reduced NJ DKQP NJ Full G/C	
Unpreserved		Preserved		Other:		Grab or Comp.		EDD Type (circle) EQUIS (standard) NY/SEDEC EQUIS NJDEP SRP Haz Site Standard Excel CMDP Other: EFWBDD Regulatory Comparative Compared to the following Regulation(s): (please fill in) Res DEC 1/c DEC GB PNC	
Sample Identification		Date		Time		Matrix		Field Filtered	
VHB-SB-18(4.1-8')		7/1/24		12:00		S			
VHB-SB-19(0.4-1.5')		7/1/24		12:15		S			
VHB-SB-19(5.4-6.3')		7/1/24		12:20		S			
VHB-SB-19(7-8.4')		7/1/24		12:25		S			
VHB-SB-20(0.5-1.5')		7/1/24		12:30		S			
VHB-SB-20(2-2.4')		7/1/24		12:35		S			
VHB-SB-20(5.6-6.3')		7/1/24		12:40		S			
VHB-SB-21(0.5-1.5')		7/1/24		13:10		S			
VHB-SB-21(5.3-7')		7/1/24		13:25		S			
VHB-SB-21(10-12')		7/1/24		13:20		S			
DVP-07012024		7/1/24		8:55		S			
Field Blank-07012024		7/1/24		8:55		S			

Comments: No tax - work is for City of New London		Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N Custody Seals: Y / N Containers Intact: Y / N COC/Labels Agree: Y / N Preservation Confirmed: Y / N COC Complete: Y / N COC Received: Y / N Appropriate Sample Volumes: Y / N Appropriate Sample Containers: Y / N Cooler Temperature Confirmed: Y / N Samples Submitted within Holding Times: Y / N Corrective Action Form Required: Y / N	
1. Samples Received by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]		2. Samples Relinquished by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]	
3. Samples Received by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]		3. Samples Received by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]	
4. Samples Relinquished by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]		4. Samples Relinquished by / Company Date/Time: 7/1/24 16:30 Signature: [Signature]	



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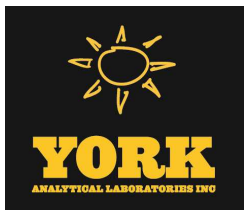
YORK Project Number

246012

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 2161 Whitesville Rd Toms River, NJ 08755 clientservices@yorktab.com 800-306-YORK

Page 2 of 2

Report To: Company: VHB Address: 100 East Meadow Road, Suite 200 Phone: 860 807 4303 Contact: Pam Lindy, Michael Holstein E-mail: plindy@vhb.com; mh@vhb.com		Invoice To: Company: " " Address: " " Phone: " " Contact: " " E-mail: " "		YOUR Project Name / Number Humphreys 25K / 43340		Samples Collected From NY ☐ CT ☒ Other: (please specify) NJ ☐ PA ☐		Turn-Around Time RUSH - Next Day RUSH - Two Day RUSH - Three Day RUSH - Four Day RUSH - Five Day Standard (6-9 Day) PFAS Standard 7-10 Day ☒																																																																
Matrix Codes S - soil/solid/sludge GW - groundwater DW - drinking water SW - surface water WW - wastewater O - Oil Other				Preservative (please list number of containers) HCl (hydrochloric acid) MeOH (methanol) HNO ₃ (nitric acid) H ₂ SO ₄ (sulfuric acid) NaOH (sodium hydroxide) Na ₂ SO ₃ (sodium thio.) Trizma Ammonium Acetate Other:				Analyses Requested PFAS by 1633 H01D																																																																
Comments: Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved. Neal Holstein				Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N Custody Seals: Y ☒ N ☐ COC/Labels Agree: Y ☒ N ☐ COC Complete: Y ☒ N ☐ COC Received: Y ☒ N ☐ Appropriate Sample Volumes: Y ☒ N ☐ Cooler Temperature Confirmed: Y ☒ N ☐ Samples Submitted within Holding Times: Y ☒ N ☐ Corrective Action Form Required: Y ☐ N ☒																																																																				
Sample Identification <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample</th> <th>Collection by: (print AND sign your name)</th> <th>Date</th> <th>Time</th> <th>Matrix</th> </tr> </thead> <tbody> <tr><td>VHB-SB-18(6.1-8')</td><td></td><td>7/1/24</td><td>12:00</td><td>S</td></tr> <tr><td>VHB-SB-19(0.4-1.6')</td><td></td><td></td><td>12:15</td><td></td></tr> <tr><td>VHB-SB-19(5.4-6.7')</td><td></td><td></td><td>12:20</td><td></td></tr> <tr><td>VHB-SB-19(7.8-4')</td><td></td><td></td><td>12:25</td><td></td></tr> <tr><td>VHB-SB-20(0.5-1.5')</td><td></td><td></td><td>12:30</td><td></td></tr> <tr><td>VHB-SB-20(2.2-4')</td><td></td><td></td><td>12:35</td><td></td></tr> <tr><td>VHB-SB-20(5.6-6.7')</td><td></td><td></td><td>12:40</td><td></td></tr> <tr><td>VHB-SB-21(0.5-1.5')</td><td></td><td></td><td>13:10</td><td></td></tr> <tr><td>VHB-SB-21(5.3-7')</td><td></td><td></td><td>13:15</td><td></td></tr> <tr><td>VHB-SB-21(10.12')</td><td></td><td></td><td>13:20</td><td>S</td></tr> <tr><td>DVP - 07012024</td><td></td><td>7/1/24</td><td>13:20</td><td>S</td></tr> <tr><td>Field Blank - 07012024</td><td></td><td>7/1/24</td><td>8:55</td><td></td></tr> </tbody> </table>				Sample	Collection by: (print AND sign your name)	Date	Time	Matrix	VHB-SB-18(6.1-8')		7/1/24	12:00	S	VHB-SB-19(0.4-1.6')			12:15		VHB-SB-19(5.4-6.7')			12:20		VHB-SB-19(7.8-4')			12:25		VHB-SB-20(0.5-1.5')			12:30		VHB-SB-20(2.2-4')			12:35		VHB-SB-20(5.6-6.7')			12:40		VHB-SB-21(0.5-1.5')			13:10		VHB-SB-21(5.3-7')			13:15		VHB-SB-21(10.12')			13:20	S	DVP - 07012024		7/1/24	13:20	S	Field Blank - 07012024		7/1/24	8:55		Other: EFWBDD Regulatory Comparative Compared to the following Regulation(s): (please fill in) RES DEL 1/c DED GB PMC			
Sample	Collection by: (print AND sign your name)	Date	Time	Matrix																																																																				
VHB-SB-18(6.1-8')		7/1/24	12:00	S																																																																				
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Field Filtered Field Filtered				Lab Filtered Lab Filtered																																																																				



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 07/24/2024

Client Project ID: 43340 - Hempstead Park

York Project (SDG) No.: 24G0588

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 07/24/2024
Client Project ID: 43340 - Hempstead Park
York Project (SDG) No.: 24G0588

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on July 10, 2024 and listed below. The project was identified as your project: **43340 - Hempstead Park**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24G0588-01	VHB-MW-01-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-02	VHB-MW-02-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-03	MW-1R-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-04	MW-3-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-05	MW-6-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-06	Dup-20240709	Ground Water	07/09/2024	07/10/2024
24G0588-07	Trip Blank-20240709	Water	07/09/2024	07/10/2024

General Notes for York Project (SDG) No.: 24G0588

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Cassie L Mosher
Laboratory Manager

Date: 07/24/2024





Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0588

43340 - Hempstead Park

Ground Water

July 9, 2024 3:10 pm

07/10/2024

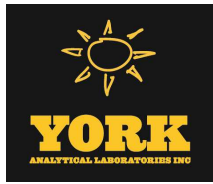
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
95-63-6	1,2,4-Trimethylbenzene	212		ug/L	5.00	10	EPA 8260C	07/11/2024 08:00	07/12/2024 16:18	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
78-93-3	2-Butanone	0.600		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
67-64-1	Acetone	10.9	CAL-E, ICVE	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
74-83-9	Bromomethane	ND	QL-02, CCVE	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT



Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 3:10 pm

Date Received

07/10/2024

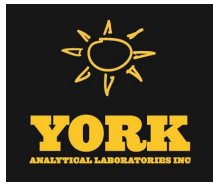
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
98-82-8	Isopropylbenzene	7.39		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
103-65-1	n-Propylbenzene	5.16		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
135-98-8	sec-Butylbenzene	2.58		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
98-06-6	tert-Butylbenzene	2.85		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
127-18-4	Tetrachloroethylene	ND	QL-02, ICVE	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 13:59	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	101 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	99.9 %	70-130							



Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 3:10 pm

Date Received

07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	100 %			70-130					

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.62	1	EPA 8270D	07/15/2024 12:47	07/16/2024 12:10	LL
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	85.1 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	52.9 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	104 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
208-96-8	Acenaphthylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
120-12-7	Anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
218-01-9	Chrysene	ND	ICVE20	ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
206-44-0	Fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
86-73-7	Fluorene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
91-20-3	Naphthalene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
85-01-8	Phenanthrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL
129-00-0	Pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:19	LL

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	43.1		ng/L	1.72	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	22.9		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	16.0		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

RICHMOND HILL, NY 11418

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(203) 325-1371

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ClientServices@yorklab.com



Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 3:10 pm

Date Received
07/10/2024

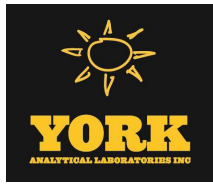
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	205		ng/L	1.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
335-67-1	Perfluorooctanoic acid (PFOA)	33.8		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9.76		ng/L	1.81	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
375-95-1	Perfluorononanoic acid (PFNA)	1.51	J	ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
2355-31-9	N-MeFOSAA	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
2991-50-6	N-EtFOSAA	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	15.9		ng/L	3.88	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	5.27		ng/L	1.85	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	5.13	J	ng/L	7.38	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.45	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	17.9		ng/L	7.76	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		ng/L	3.45	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.88	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.88	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.88	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	57.7		ng/L	1.82	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.28	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.76	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.34	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	7.26	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
919005-14-4	ADONA	ND		ng/L	7.34	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND	PF-CCV- L	ng/L	1.88	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.86	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM



Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 3:10 pm

Date Received

07/10/2024

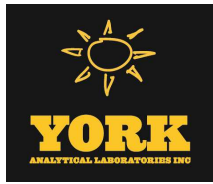
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.85	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	24.3	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	24.3	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
24448-09-7	N-MeFOSE	ND		ng/L	19.4	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
31506-32-8	N-MeFOSA	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
1691-99-2	N-EtFOSE	ND		ng/L	19.4	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
4151-50-2	N-EtFOSA	ND		ng/L	1.94	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 01:47	AM
Surrogate Recoveries		Result		Acceptance Range						
Surrogate: M3PFBS		110 %		25-150						
Surrogate: M5PFHxA		110 %		25-150						
Surrogate: M4PFHpA		116 %		25-150						
Surrogate: M3PFHxS		110 %		25-150						
Surrogate: Perfluoro-n-[13C8]octanoic acid		101 %		25-150						
Surrogate: M6PFDA		87.7 %		25-150						
Surrogate: M7PFUdA		61.8 %		25-150						
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		36.2 %		25-150						
Surrogate: M2PFTeDA		11.8 %		10-150						
Surrogate: Perfluoro-n-[13C4]butanoic acid		43.9 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfoni		110 %		25-150						
Surrogate: Perfluoro-n-[13C5]pentanoic aci		105 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfon		59.2 %		10-150						
Surrogate: d3-N-MeFOSAA		70.6 %		25-150						
Surrogate: d5-N-EtFOSAA		58.3 %		25-150						
Surrogate: M2-6:2 FTS		109 %		25-200						
Surrogate: M2-8:2 FTS		75.6 %		25-200						
Surrogate: M9PFNA		107 %		25-150						
Surrogate: M2-4:2 FTS		140 %		25-150						
Surrogate: d-N-MeFOSA		28.8 %		25-150						
Surrogate: d-N-EtFOSA		23.8 %	PFSu-L	25-150						
Surrogate: M3HFPO-DA		111 %		25-150						
Surrogate: d9-N-EtFOSE		17.0 %	PFSu-L	25-150						
Surrogate: d7-N-MeFOSE		28.0 %		25-150						



Sample Information

Client Sample ID: VHB-MW-01-20240709

York Sample ID: 24G0588-01

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 3:10 pm

Date Received

07/10/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.260		mg/L	0.167	1	CT DEP ETPH	07/16/2024 12:10	07/17/2024 12:54	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	55.5 %			30-140					

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	07/15/2024 08:42	07/15/2024 08:42	PFA

Sample Information

Client Sample ID: VHB-MW-02-20240709

York Sample ID: 24G0588-02

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 8:50 am

Date Received

07/10/2024

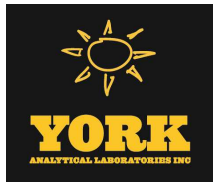
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	152	J	ng/L	176	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	168	J	ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4180		ng/L	182	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	8800		ng/L	185	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	66.5	J	ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ



Sample Information

Client Sample ID: VHB-MW-02-20240709

York Sample ID: 24G0588-02

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 8:50 am

Date Received

07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	187	J	ng/L	189	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	191	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	754	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	762	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	88.1	J	ng/L	794	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	353	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	366		ng/L	187	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	744	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	794	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	750	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	742	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
919005-14-4	ADONA	ND		ng/L	750	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	192	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	190	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	496	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	2480	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	2480	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	1980	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	1980	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:28	ESJ
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		131 %	25-150							
Surrogate: M5PFHxA		111 %	25-150							
Surrogate: M4PFHpA		128 %	25-150							



Sample Information

Client Sample ID: VHB-MW-02-20240709

York Sample ID: 24G0588-02

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 8:50 am

Date Received
07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: M3PFHxS	129 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid	124 %			25-150					
	Surrogate: M6PFDA	119 %			25-150					
	Surrogate: M7PFUdA	97.4 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	88.8 %			25-150					
	Surrogate: M2PFTeDA	41.0 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid	4.83 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfoni	136 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic aci	114 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonc	60.9 %			10-150					
	Surrogate: d3-N-MeFOSAA	103 %			25-150					
	Surrogate: d5-N-EtFOSAA	81.3 %			25-150					
	Surrogate: M2-6:2 FTS	127 %			25-200					
	Surrogate: M2-8:2 FTS	102 %			25-200					
	Surrogate: M9PFNA	139 %			25-150					
	Surrogate: M2-4:2 FTS	84.2 %			25-150					
	Surrogate: d-N-MeFOSA	35.6 %			25-150					
	Surrogate: d-N-EtFOSA	23.9 %	PFSu-L		25-150					
	Surrogate: M3HFPO-DA	134 %			25-150					
	Surrogate: d9-N-EtFOSE	28.5 %			25-150					
	Surrogate: d7-N-MeFOSE	40.6 %			25-150					

Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 12:30 pm

Date Received
07/10/2024

VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT

120 RESEARCH DRIVE

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ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 12:30 pm

Date Received
07/10/2024

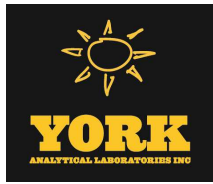
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
67-64-1	Acetone	ND		CAL-E ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
74-83-9	Bromomethane	ND		CCVE, ug/L QL-02	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
67-66-3	Chloroform	2.16		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:30 pm

Date Received

07/10/2024

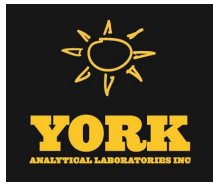
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:26	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	106 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	99.7 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %	70-130							



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:30 pm

Date Received

07/10/2024

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.13	1	EPA 8270D	07/15/2024 12:47	07/16/2024 12:49	LL
Surrogate Recoveries		Result		Acceptance Range						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	80.2 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	57.8 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	89.2 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
208-96-8	Acenaphthylene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
120-12-7	Anthracene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
218-01-9	Chrysene	ND	ICVE20	ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
206-44-0	Fluoranthene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
86-73-7	Fluorene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
91-20-3	Naphthalene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
85-01-8	Phenanthrene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL
129-00-0	Pyrene	ND		ug/L	0.0513	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 13:50	LL

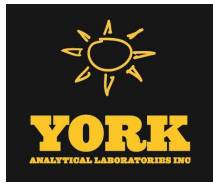
Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	07/11/2024 08:42	07/12/2024 16:09	ss
Surrogate Recoveries		Result		Acceptance Range						
17647-74-4	Surrogate: 1,4-Dioxane-d8	71.3 %			36.6-118					



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:30 pm

Date Received

07/10/2024

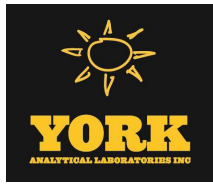
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	24.2		ng/L	1.66	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	16.0		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	9.73		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	89.5		ng/L	1.71	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
335-67-1	Perfluorooctanoic acid (PFOA)	24.0		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	15.1		ng/L	1.74	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
375-95-1	Perfluorononanoic acid (PFNA)	1.67	J	ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
2355-31-9	N-MeFOSAA	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
2991-50-6	N-EtFOSAA	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	20.7		ng/L	3.75	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	3.53		ng/L	1.79	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.81	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.12	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.19	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	8.95		ng/L	7.49	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		ng/L	3.33	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.75	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.75	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.75	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	22.4		ng/L	1.76	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.03	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.49	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.08	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	7.01	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
919005-14-4	ADONA	ND		ng/L	7.08	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:30 pm

Date Received

07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND	PF-CCV-	ng/L	1.82	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.80	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.68	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.4	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.4	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
24448-09-7	N-MeFOSE	ND		ng/L	18.7	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
31506-32-8	N-MeFOSA	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
1691-99-2	N-EtFOSE	ND		ng/L	18.7	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
4151-50-2	N-EtFOSA	ND		ng/L	1.87	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:20	AM
Surrogate Recoveries		Result	Acceptance Range							
Surrogate: M3PFBS		109 %	25-150							
Surrogate: M5PFHxA		114 %	25-150							
Surrogate: M4PFHpA		122 %	25-150							
Surrogate: M3PFHxS		110 %	25-150							
Surrogate: Perfluoro-n-[13C8]octanoic acid		104 %	25-150							
Surrogate: M6PFDA		101 %	25-150							
Surrogate: M7PFUdA		70.9 %	25-150							
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		47.3 %	25-150							
Surrogate: M2PFTeDA		22.5 %	10-150							
Surrogate: Perfluoro-n-[13C4]butanoic acid		26.3 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfoni		107 %	25-150							
Surrogate: Perfluoro-n-[13C5]pentanoic aci		99.7 %	25-150							
Surrogate: Perfluoro-1-[13C8]octanesulfonc		55.8 %	10-150							
Surrogate: d3-N-MeFOSAA		63.1 %	25-150							
Surrogate: d5-N-EtFOSAA		60.2 %	25-150							
Surrogate: M2-6:2 FTS		91.6 %	25-200							
Surrogate: M2-8:2 FTS		76.5 %	25-200							
Surrogate: M9PFNA		125 %	25-150							
Surrogate: M2-4:2 FTS		67.5 %	25-150							
Surrogate: d-N-MeFOSA		25.4 %	25-150							
Surrogate: d-N-EtFOSA		27.2 %	25-150							
Surrogate: M3HFPO-DA		114 %	25-150							
Surrogate: d9-N-EtFOSE		26.6 %	25-150							
Surrogate: d7-N-MeFOSE		34.7 %	25-150							



Sample Information

Client Sample ID: MW-1R-20240709

York Sample ID: 24G0588-03

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 12:30 pm

Date Received
07/10/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/L	0.162	1	CT DEP ETPH	07/15/2024 08:27	07/15/2024 23:01	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	46.5 %			30-140					

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	07/15/2024 08:42	07/15/2024 08:42	PFA

Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 9:30 am

Date Received
07/10/2024

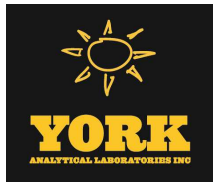
VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

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Ground Water

Collection Date/Time

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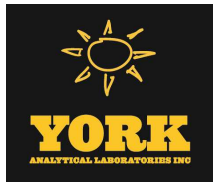
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
67-64-1	Acetone	ND	CAL-E	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
74-83-9	Bromomethane	ND	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 9:30 am

Date Received

07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 14:52	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	107 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	99.6 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	102 %	70-130							

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.62	1	EPA 8270D	07/15/2024 12:47	07/16/2024 13:28	LL
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	104 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	89.7 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	109 %	30-130							

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
208-96-8	Acenaphthylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL

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STRATFORD, CT 06615



132-02 89th AVENUE

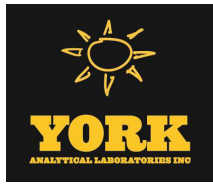
RICHMOND HILL, NY 11418

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ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 9:30 am

Date Received

07/10/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
218-01-9	Chrysene	ND	ICVE20	ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
206-44-0	Fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
86-73-7	Fluorene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
91-20-3	Naphthalene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
85-01-8	Phenanthrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL
129-00-0	Pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:20	LL

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	07/11/2024 08:42	07/12/2024 16:27	ss
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	Surrogate: 1,4-Dioxane-d8	50.0 %			36.6-118					

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	179		ng/L	176	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	152	J	ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4620		ng/L	182	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	9450		ng/L	185	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ

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132-02 89th AVENUE

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RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 9:30 am

Date Received
07/10/2024

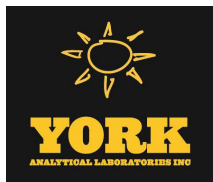
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	68.8	J	ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	167	J	ng/L	189	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	191	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	754	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	762	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	65.7	J	ng/L	794	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	353	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	397	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	460		ng/L	187	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	744	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	794	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	750	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	742	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
919005-14-4	ADONA	ND		ng/L	750	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	192	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	190	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	496	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	2480	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	2480	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	1980	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	1980	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	198	1	EPA 1633 Draft 3	07/18/2024 07:53	07/18/2024 18:44	ESJ



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0588

43340 - Hempstead Park

Ground Water

July 9, 2024 9:30 am

07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
Surrogate Recoveries		Result			Acceptance Range					
	Surrogate: M3PFBS	133 %			25-150					
	Surrogate: M5PFHxA	119 %			25-150					
	Surrogate: M4PFHpA	146 %			25-150					
	Surrogate: M3PFHxS	129 %			25-150					
	Surrogate: Perfluoro-n-[13C8]octanoic acid	107 %			25-150					
	Surrogate: M6PFDA	127 %			25-150					
	Surrogate: M7PFUdA	97.2 %			25-150					
	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	80.0 %			25-150					
	Surrogate: M2PFTeDA	48.3 %			10-150					
	Surrogate: Perfluoro-n-[13C4]butanoic acid	3.84 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfoni	135 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic aci	122 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonc	57.5 %			10-150					
	Surrogate: d3-N-MeFOSAA	90.1 %			25-150					
	Surrogate: d5-N-EtFOSAA	80.7 %			25-150					
	Surrogate: M2-6:2 FTS	124 %			25-200					
	Surrogate: M2-8:2 FTS	98.4 %			25-200					
	Surrogate: M9PFNA	136 %			25-150					
	Surrogate: M2-4:2 FTS	69.0 %			25-150					
	Surrogate: d-N-MeFOSA	34.0 %			25-150					
	Surrogate: d-N-EtFOSA	23.7 %	PFSu-L		25-150					
	Surrogate: M3HFPO-DA	132 %			25-150					
	Surrogate: d9-N-EtFOSE	25.1 %			25-150					
	Surrogate: d7-N-MeFOSE	36.8 %			25-150					

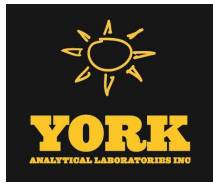
Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/L	0.158	1	CT DEP ETPH	07/15/2024 08:27	07/15/2024 23:39	GXB
Surrogate Recoveries		Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	60.2 %			30-140					



Sample Information

Client Sample ID: MW-3-20240709

York Sample ID: 24G0588-04

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 9:30 am

Date Received

07/10/2024

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	07/15/2024 08:42	07/15/2024 08:42	PFA

Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 1:55 pm

Date Received

07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT



Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 1:55 pm

Date Received
07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
67-64-1	Acetone	ND	CAL-E	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
74-83-9	Bromomethane	ND	QL-02, CCVE	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
135-98-8	sec-Butylbenzene	1.11		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT



Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 1:55 pm

Date Received
07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:19	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	104 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	100 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	103 %	70-130							

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.62	1	EPA 8270D	07/15/2024 12:47	07/16/2024 18:10	LL
Surrogate Recoveries		Result	Acceptance Range							
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	88.6 %	30-130							
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	83.5 %	30-130							
1718-51-0	Surrogate: SURR: Terphenyl-d14	109 %	30-130							

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
208-96-8	Acenaphthylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
120-12-7	Anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
218-01-9	Chrysene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
206-44-0	Fluoranthene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL



Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 1:55 pm

Date Received
07/10/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
86-73-7	Fluorene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
91-20-3	Naphthalene	0.0674	B	ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
85-01-8	Phenanthrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL
129-00-0	Pyrene	ND		ug/L	0.0562	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 16:21	LL

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	07/11/2024 08:42	07/12/2024 16:45	ss
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	Surrogate: 1,4-Dioxane-d8	60.9 %			36.6-118					

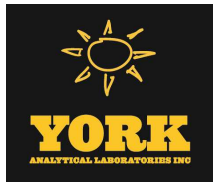
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.94		ng/L	1.68	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	13.2		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.15		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	7.59		ng/L	1.74	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
335-67-1	Perfluorooctanoic acid (PFOA)	16.3		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	68.4		ng/L	1.77	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
375-95-1	Perfluorononanoic acid (PFNA)	0.778	J	ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
2355-31-9	N-MeFOSAA	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
2991-50-6	N-EtFOSAA	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	15.1		ng/L	3.80	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.84	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.23	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM



Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 1:55 pm

Date Received

07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.30	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	12.6		ng/L	7.61	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.39	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ng/L	3.80	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.80	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.80	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	0.741	J	ng/L	1.79	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.13	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.61	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.19	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	7.11	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
919005-14-4	ADONA	ND		ng/L	7.19	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND	PF-CCV- L	ng/L	1.84	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.83	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPPrPA)	ND		ng/L	4.75	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.8	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.8	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
24448-09-7	N-MeFOSE	ND		ng/L	19.0	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
31506-32-8	N-MeFOSA	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
1691-99-2	N-EtFOSE	ND		ng/L	19.0	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM
4151-50-2	N-EtFOSA	ND		ng/L	1.90	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 02:52	AM

Surrogate Recoveries

Result

Acceptance Range

Surrogate: M3PFBS	101 %	25-150
Surrogate: M5PFHxA	106 %	25-150
Surrogate: M4PFHpA	108 %	25-150
Surrogate: M3PFHxS	109 %	25-150
Surrogate: Perfluoro-n-[13C8]octanoic acid	101 %	25-150
Surrogate: M6PFDA	85.7 %	25-150
Surrogate: M7PFUdA	63.0 %	25-150
Surrogate: Perfluoro-n-[1,2-13C2]dodecano	41.6 %	25-150
Surrogate: M2PFTeDA	22.4 %	10-150



Sample Information

Client Sample ID: MW-6-20240709

York Sample ID: 24G0588-05

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 1:55 pm

Date Received
07/10/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	Surrogate: Perfluoro-n-[13C4]butanoic acid	19.8 %	PFSu-L		25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl fluoride	102 %			25-150					
	Surrogate: Perfluoro-n-[13C5]pentanoic acid	95.0 %			25-150					
	Surrogate: Perfluoro-1-[13C8]octanesulfonyl fluoride	54.2 %			10-150					
	Surrogate: d3-N-MeFOSAA	64.5 %			25-150					
	Surrogate: d5-N-EtFOSAA	56.6 %			25-150					
	Surrogate: M2-6:2 FTS	131 %			25-200					
	Surrogate: M2-8:2 FTS	67.8 %			25-200					
	Surrogate: M9PFNA	108 %			25-150					
	Surrogate: M2-4:2 FTS	184 %	PFSu-H		25-150					
	Surrogate: d-N-MeFOSA	31.0 %			25-150					
	Surrogate: d-N-EtFOSA	26.5 %			25-150					
	Surrogate: M3HFPO-DA	104 %			25-150					
	Surrogate: d9-N-EtFOSE	23.1 %	PFSu-L		25-150					
	Surrogate: d7-N-MeFOSE	32.9 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.215		mg/L	0.167	1	CT DEP ETPH	07/15/2024 08:27	07/16/2024 00:18	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	57.3 %			30-140					

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	07/15/2024 08:42	07/15/2024 08:42	PFA

Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

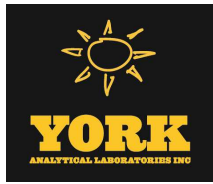
York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Ground Water

Collection Date/Time
July 9, 2024 12:01 am

Date Received
07/10/2024



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
67-64-1	Acetone	ND	CAL-E	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
74-83-9	Bromomethane	ND	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT

120 RESEARCH DRIVE

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STRATFORD, CT 06615

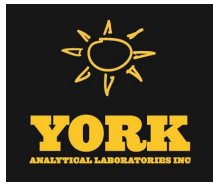
(203) 325-1371

132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

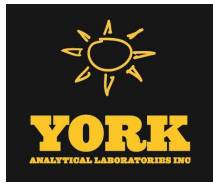
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
135-98-8	sec-Butylbenzene	1.17		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 15:46	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	103 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	101 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %	70-130							



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	07/15/2024 12:47	07/16/2024 14:08	LL
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	72.2 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	64.3 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	64.0 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	0.170	B	ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
208-96-8	Acenaphthylene	0.0500	B	ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
120-12-7	Anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
218-01-9	Chrysene	ND	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
53-70-3	Dibenzo(a,h)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
206-44-0	Fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
86-73-7	Fluorene	0.0700		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
91-20-3	Naphthalene	0.290	B	ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
85-01-8	Phenanthrene	0.0800		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL
129-00-0	Pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	07/15/2024 12:47	07/17/2024 14:50	LL

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3535A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
123-91-1	1,4-Dioxane	ND		ug/L	0.300	1	EPA 8270E SIM	07/11/2024 08:42	07/12/2024 17:02	ss
	Surrogate Recoveries	Result			Acceptance Range					
17647-74-4	Surrogate: 1,4-Dioxane-d8	59.3 %			36.6-118					



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24G0588

43340 - Hempstead Park

Ground Water

July 9, 2024 12:01 am

07/10/2024

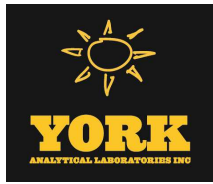
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	3.53		ng/L	1.67	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	13.2		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	5.48		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.65		ng/L	1.73	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
335-67-1	Perfluorooctanoic acid (PFOA)	15.8		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	50.1		ng/L	1.76	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
375-95-1	Perfluorononanoic acid (PFNA)	1.10	J	ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
2355-31-9	N-MeFOSAA	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
2991-50-6	N-EtFOSAA	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	15.2		ng/L	3.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.81	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.18	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.26	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	11.5		ng/L	7.56	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.37	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	3.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ng/L	1.78	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.09	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.56	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.15	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	7.07	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
919005-14-4	ADONA	ND		ng/L	7.15	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		PF-CCV- ng/L	1.83	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

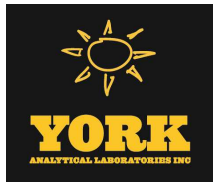
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPPrPA)	ND		ng/L	4.73	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.6	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.6	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
24448-09-7	N-MeFOSE	ND		ng/L	18.9	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
31506-32-8	N-MeFOSA	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
1691-99-2	N-EtFOSE	ND		ng/L	18.9	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
4151-50-2	N-EtFOSA	ND		ng/L	1.89	1	EPA 1633 Draft 3	07/15/2024 16:16	07/17/2024 03:08	AM
Surrogate Recoveries		Result		Acceptance Range						
Surrogate: M3PFBS		101 %		25-150						
Surrogate: M5PFHxA		127 %		25-150						
Surrogate: M4PFHpA		132 %		25-150						
Surrogate: M3PFHxS		109 %		25-150						
Surrogate: Perfluoro-n-[13C8]octanoic acid		117 %		25-150						
Surrogate: M6PFDA		117 %		25-150						
Surrogate: M7PFUdA		78.5 %		25-150						
Surrogate: Perfluoro-n-[1,2-13C2]dodecano		57.5 %		25-150						
Surrogate: M2PFTeDA		35.3 %		10-150						
Surrogate: Perfluoro-n-[13C4]butanoic acid		119 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfoni		110 %		25-150						
Surrogate: Perfluoro-n-[13C5]pentanoic aci		121 %		25-150						
Surrogate: Perfluoro-1-[13C8]octanesulfonc		55.6 %		10-150						
Surrogate: d3-N-MeFOSAA		65.1 %		25-150						
Surrogate: d5-N-EtFOSAA		56.1 %		25-150						
Surrogate: M2-6:2 FTS		136 %		25-200						
Surrogate: M2-8:2 FTS		64.9 %		25-200						
Surrogate: M9PFNA		117 %		25-150						
Surrogate: M2-4:2 FTS		193 %	PFSu-H	25-150						
Surrogate: d-N-MeFOSA		27.7 %		25-150						
Surrogate: d-N-EtFOSA		23.3 %	PFSu-L	25-150						
Surrogate: M3HFPO-DA		117 %		25-150						
Surrogate: d9-N-EtFOSE		27.7 %		25-150						
Surrogate: d7-N-MeFOSE		35.5 %		25-150						



Sample Information

Client Sample ID: Dup-20240709

York Sample ID: 24G0588-06

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Ground Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.204		mg/L	0.167	1	CT DEP ETPH	07/15/2024 08:27	07/16/2024 00:56	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	51.8 %			30-140					

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	07/15/2024 08:42	07/15/2024 08:42	PFA

Sample Information

Client Sample ID: Trip Blank-20240709

York Sample ID: 24G0588-07

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT

120 RESEARCH DRIVE

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132-02 89th AVENUE

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Sample Information

Client Sample ID: Trip Blank-20240709

York Sample ID: 24G0588-07

York Project (SDG) No.
24G0588

Client Project ID
43340 - Hempstead Park

Matrix
Water

Collection Date/Time
July 9, 2024 12:01 am

Date Received
07/10/2024

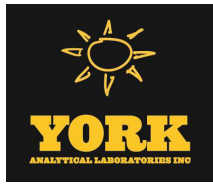
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
67-64-1	Acetone	ND	CAL-E	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
74-83-9	Bromomethane	ND	QL-02, CCVE	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
91-20-3	Naphthalene	ND	ICVE20	ug/L	2.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT



Sample Information

Client Sample ID: Trip Blank-20240709

York Sample ID: 24G0588-07

York Project (SDG) No.

24G0588

Client Project ID

43340 - Hempstead Park

Matrix

Water

Collection Date/Time

July 9, 2024 12:01 am

Date Received

07/10/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	07/11/2024 08:00	07/11/2024 16:39	BMT
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	98.7 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	101 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	106 %	70-130							



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

Yes / No / NA / NR

1) For each analytical method referenced in this laboratory, report package, were all sepcified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)? YES

1A) Were the method specified preservation, and holding time requirements met? YES

1B) VPH and EPH Methods only: Was the method conducted without significant modifications (See section 11.3 of respective RCP methods) NR

2) Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of custody document(s)? YES

3) Were samples received at an appropriate temperature (< or = 6°C)? YES

4) Were all QA/QC performance criteria specified in theCTDEP Reasonable Confidence Protocol documents achieved ? NO

5 a) Were reporting limits specified or referenced on the chain-of-custody? NO

5 b) Were these reporting limits met? NA

6) For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents? NO

7) Are project-specific matrix spikes and laboratory duplicates included in this data set? NO

Notes: For all questions to which the response was No (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Reasonable Confidence". This form may not be altered and all question should be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: 

Position: Laboratory Manager

Printed name: Cassie L. Mosher

Date: 7/24/2024



York Narrative- CTDEEP RCP Introduction

This Work Order Narrative includes the following items for full review of any quality issues encountered with samples and their analyses for the parameters requested:

1. Sample Receipt Information, including a Sample Summary which cross references your sample ID with York Analytical sample ID, identifying the matrix and Date/Time collected and received at York.
2. Analysis Methodologies employed for the work order
3. Any Sample Issues encountered such as Holding time exceedances, improper containers/preservation, or any related issue with sample integrity
4. Specific Analysis Findings in order: Volatiles, Semi-Volatiles, Pesticides/PCBs, Herbicides, other GC parameters, Metals, Mercury, Wet Chemistry.
5. Analysis Findings Include:
 - BIAS Summary Report-Multiple Lines of Evidence
 - Analyte qualifier summary
 - Samples and associated Calibration Curve(s)
 - Calibration Outliers Discussion/Tabular presentation and affected samples
 - Initial Calibration Verification (ICV) information
 - Batch QC Sample Performance (Blanks, Blank Spikes (BS), MS/MSD)
 - Internal Standard Performance
 - Surrogate Performance
 - Example Calculations

York Analytical Work Order Narrative

Work Order Narrative

York Analytical Work Order No.: 24G0588

Client : VHB

Client Project ID : 43340 - Hempstead Park

Prepared for : Pamela Lind

1.0) Introduction

This work order Narrative applies to the following samples submitted to our laboratory on: 07/10/2024 3:50 PM

9 sample(s) were received intact in a custody-sealed cooler(s) unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ($\leq 6^{\circ}\text{C}$) and documented as: {4.2} $^{\circ}\text{C}$

Sample Summary

<u>SampleName</u>	<u>Lab Number</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
VHB-MW-01-20240709	24G0588-01	Water	07/09/2024 3:10 PM	07/10/2024 3:50 PM
VHB-MW-02-20240709	24G0588-02	Water	07/09/2024 8:50 AM	07/10/2024 3:50 PM
MW-1R-20240709	24G0588-03	Water	07/09/2024 12:30 PM	07/10/2024 3:50 PM
MW-3-20240709	24G0588-04	Water	07/09/2024 9:30 AM	07/10/2024 3:50 PM
MW-6-20240709	24G0588-05	Water	07/09/2024 1:55 PM	07/10/2024 3:50 PM
Dup-20240709	24G0588-06	Water	07/09/2024 12:01 AM	07/10/2024 3:50 PM
Trip Blank-20240709	24G0588-07	Water	07/09/2024 12:01 AM	07/10/2024 3:50 PM
Field Blank-20240709	24G0588-08	Water	07/09/2024 3:00 PM	07/10/2024 3:50 PM
Equipment Blank-20240709	24G0588-09	Water	07/09/2024 3:05 PM	07/10/2024 3:50 PM

WorkOrder Comments

The following CT RCP list of compound Reporting Limits do not meet the current action levels defined in the State of Connecticut Remedial Standard Regulations (RSR) as amended June 27, 2013 for groundwater protection criteria (GWPC) due to method limitations: Ethylene Dibromide (EDB). If EDB is required to meet GWPC, the LEP must request EPA SW 846 method 8011.

York Analytical Work Order Narrative

2.0 Methodology

<u>Analysis Class</u>	<u>Preparation Method</u>	<u>Analysis Methodology</u>
VOA	EPA 5030B	EPA 8260C
SVOA	EPA 3510C	EPA 8270D
SVOA	EPA 3510C	EPA 8270D SIM
SVOA	EPA 3535A	EPA 8270E SIM
PFAS	EPA 1633 Prep	EPA 1633 Draft 3
GC	EPA 3545A	CT DEP ETPH
GC	EPA SW846-3510C Low Level	CT DEP ETPH
METALS	EPA 3015A	EPA 6020B
HG	EPA SW846-7470A	EPA 7470

Analyte List

Method	Analyte
CT DEP ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)
EPA 1633 Draft 3	11CL-PF3OUdS ; 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) ; 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) ; 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) ; 3-Perfluoroheptyl propanoic acid (FHpPA) ; 3-Perfluoropentyl propanoic acid (FPpPA) ; 3-Perfluoropropyl propanoic acid (FPrPA) ; 9CL-PF3ONS ; ADONA ; HFPO-DA (Gen-X) ; N-EtFOSA ; N-EtFOSAA ; N-EtFOSE ; N-MeFOSA ; N-MeFOSAA ; N-MeFOSE ; Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) ; Perfluoro-1-decanesulfonic acid (PFDS) ; Perfluoro-1-heptanesulfonic acid (PFHpS) ; Perfluoro-1-nonanesulfonic acid (PFNS) ; Perfluoro-1-octanesulfonamide (FOSA) ; Perfluoro-1-pentanesulfonate (PFPeS) ; Perfluoro-3,6-dioxaheptanoic acid (NFDHA) ; Perfluoro-4-oxapentanoic acid (PFMPA) ; Perfluoro-5-oxahexanoic acid (PFMBA) ; Perfluorobutanesulfonic acid (PFBS) ; Perfluorodecanoic acid (PFDA) ; Perfluorododecanesulfonic acid (PFDoS) ; Perfluorododecanoic acid (PFDoA) ; Perfluoroheptanoic acid (PFHpA) ; Perfluorohexanesulfonic acid (PFHxS) ; Perfluorohexanoic acid (PFHxA) ; Perfluoro-n-butanoic acid (PFBA) ; Perfluorononanoic acid (PFNA) ; Perfluorooctanesulfonic acid (PFOS) ; Perfluorooctanoic acid (PFOA) ; Perfluoropentanoic acid (PFPeA) ; Perfluorotetradecanoic acid (PFTA) ; Perfluorotridecanoic acid (PFTTrDA) ; Perfluoroundecanoic acid (PFUnA)
EPA 6020B	Antimony ; Arsenic ; Barium ; Beryllium ; Cadmium ; Chromium ; Copper ; Lead ; Nickel ; Selenium ; Silver ; Thallium ; Vanadium ; Zinc
EPA 7470	Mercury
EPA 8260C	1,1,1,2-Tetrachloroethane ; 1,1,1-Trichloroethane ; 1,1,2,2-Tetrachloroethane ; 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) ; 1,1,2-Trichloroethane ; 1,1-Dichloroethane ; 1,1-Dichloroethylene ; 1,1-Dichloropropylene ; 1,2,3-Trichlorobenzene ; 1,2,3-Trichloropropane ; 1,2,4-Trichlorobenzene ; 1,2,4-Trimethylbenzene ; 1,2-Dibromo-3-chloropropane ; 1,2-Dibromoethane ; 1,2-Dichlorobenzene ; 1,2-Dichloroethane ; 1,2-Dichloropropane ; 1,3,5-Trimethylbenzene ; 1,3-Dichlorobenzene ; 1,3-Dichloropropane ; 1,4-Dichlorobenzene ; 2,2-Dichloropropane ; 2-Butanone ; 2-Chlorotoluene ; 2-Hexanone ; 4-Chlorotoluene ; 4-Methyl-2-pentanone ; Acetone ; Acrylonitrile ; Benzene ; Bromobenzene ; Bromochloromethane ; Bromodichloromethane ; Bromoform ; Bromomethane ; Carbon disulfide ; Carbon tetrachloride ; Chlorobenzene ; Chloroethane ; Chloroform ; Chloromethane ; cis-1,2-Dichloroethylene ; cis-1,3-Dichloropropylene ; Dibromochloromethane ; Dibromomethane ; Dichlorodifluoromethane ; Ethyl Benzene ; Hexachlorobutadiene ; Isopropylbenzene ; Methyl Methacrylate ; Methyl tert-butyl ether (MTBE) ; Methylene chloride ; Naphthalene ; n-Butylbenzene ; n-Propylbenzene ; o-Xylene ; p- & m-Xylenes ; p-Isopropyltoluene ; sec-Butylbenzene ; Styrene ; tert-Butylbenzene ; Tetrachloroethylene ; Tetrahydrofuran ; Toluene ; trans-1,2-Dichloroethylene ; trans-1,3-Dichloropropylene ; trans-1,4-dichloro-2-butene ; Trichloroethylene ; Trichlorofluoromethane ; Vinyl Chloride
EPA 8270D	1,2,4,5-Tetrachlorobenzene ; 1,2,4-Trichlorobenzene ; 2,4,5-Trichlorophenol ; 2,4,6-Trichlorophenol ; 2,4-Dichlorophenol ; 2,4-Dimethylphenol ; 2,4-Dinitrophenol ; 2,4-Dinitrotoluene ; 2,6-Dinitrotoluene ; 2-Chloronaphthalene ; 2-Chlorophenol ; 2-Methylnaphthalene ; 2-Methylphenol ; 2-Nitroaniline ; 2-Nitrophenol ; 3- & 4-Methylphenols ; 3,3-Dichlorobenzidine ; 3-Nitroaniline ; 4,6-Dinitro-2-methylphenol ; 4-Bromophenyl phenyl ether ; 4-Chloro-3-methylphenol ; 4-Chloroaniline ; 4-Chlorophenyl phenyl ether ; 4-Nitroaniline ; 4-Nitrophenol ; Aniline ; Benzyl butyl phthalate ; Bis(2-chloroethoxy)methane ; Bis(2-chloroethyl)ether ; Bis(2-chloroisopropyl)ether ; Carbazole ; Dibenzofuran ; Diethyl phthalate ; Dimethyl phthalate ; Di-n-butyl phthalate ; Di-n-octyl phthalate ; Hexachlorocyclopentadiene ; Isophorone ; N-nitroso-di-n-propylamine ; N-Nitrosodiphenylamine ; Pentachloronitrobenzene ; Phenol ; Pyridine

York Analytical Work Order Narrative

EPA 8270D SIM	Acenaphthene ; Acenaphthylene ; Anthracene ; Benzo(a)anthracene ; Benzo(a)pyrene ; Benzo(b)fluoranthene ; Benzo(g,h,i)perylene ; Benzo(k)fluoranthene ; Chrysene ; Dibenzo(a,h)anthracene ; Fluoranthene ; Fluorene ; Indeno(1,2,3-cd)pyrene ; Naphthalene ; Phenanthrene ; Pyrene
EPA 8270E SIM	1,4-Dioxane

3.0 Sample Issues

No issues were encountered with the samples submitted other than those detailed below.

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
PFAS	24G0588-01	VHB-MW-01-20240709	3-Perfluoroheptyl propanoic acid (FHpPA)		high				
PFAS	24G0588-01	VHB-MW-01-20240709	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0588-01	VHB-MW-01-20240709	Perfluorododecanesulfonic acid (PFDoS)		Low				
PFAS	24G0588-01	VHB-MW-01-20240709	Perfluorododecanoic acid (PFDoA)		high				
PFAS	24G0588-01	VHB-MW-01-20240709	Perfluorotridecanoic acid (PFTrDA)		high	high			
PFAS	24G0588-03	MW-1R-	3-Perfluoroheptyl propanoic acid (FHpPA)		high				
PFAS	24G0588-03	MW-1R-	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0588-03	MW-1R-	Perfluorododecanesulfonic acid (PFDoS)		Low				
PFAS	24G0588-03	MW-1R-	Perfluorododecanoic acid (PFDoA)		high				
PFAS	24G0588-03	MW-1R-	Perfluorotridecanoic acid (PFTrDA)		high	high			
PFAS	24G0588-05	MW-6-20240709	3-Perfluoroheptyl propanoic acid (FHpPA)		high				
PFAS	24G0588-05	MW-6-20240709	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0588-05	MW-6-20240709	Perfluorododecanesulfonic acid (PFDoS)		Low				
PFAS	24G0588-05	MW-6-20240709	Perfluorododecanoic acid (PFDoA)		high				
PFAS	24G0588-05	MW-6-20240709	Perfluorotridecanoic acid (PFTrDA)		high	high			
PFAS	24G0588-06	Dup-20240709	3-Perfluoroheptyl propanoic acid (FHpPA)		high				
PFAS	24G0588-06	Dup-20240709	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24G0588-06	Dup-20240709	Perfluorododecanesulfonic acid (PFDoS)		Low				
PFAS	24G0588-06	Dup-20240709	Perfluorododecanoic acid (PFDoA)		high				
PFAS	24G0588-06	Dup-20240709	Perfluorotridecanoic acid (PFTrDA)		high	high			

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
SVOA	24G0588-01	VHB-MW-01-20240709	Chrysene	Low					
SVOA	24G0588-03	MW-1R-	Chrysene	Low					
SVOA	24G0588-04	MW-3-20240709	Chrysene	Low					
SVOA	24G0588-05	MW-6-20240709	Chrysene	Low					
SVOA	24G0588-06	Dup-20240709	Chrysene	Low					

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24G0588-01	VHB-MW-01-20240709	1,2,3-Trichlorobenzene			high			
VOA	24G0588-01	VHB-MW-01-20240709	1,2-Dibromo-3-chloropropane			high			

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24G0588-01	VHB-MW-01-20240709	Acetone	high					
VOA	24G0588-01	VHB-MW-01-20240709	Bromomethane		Low	Low			
VOA	24G0588-01	VHB-MW-01-20240709	Naphthalene	Low		high			
VOA	24G0588-01	VHB-MW-01-20240709	Tetrachloroethylene	Low		Low			
VOA	24G0588-03	MW-1R-	1,2,3-Trichlorobenzene			high			
VOA	24G0588-03	MW-1R-	1,2-Dibromo-3-chloropropane			high			
VOA	24G0588-03	MW-1R-	Acetone	high					
VOA	24G0588-03	MW-1R-	Bromomethane		Low	Low			
VOA	24G0588-03	MW-1R-	Naphthalene	Low		high			
VOA	24G0588-03	MW-1R-	Tetrachloroethylene	Low		Low			
VOA	24G0588-04	MW-3-20240709	1,2,3-Trichlorobenzene			high			
VOA	24G0588-04	MW-3-20240709	1,2-Dibromo-3-chloropropane			high			
VOA	24G0588-04	MW-3-20240709	Acetone	high					
VOA	24G0588-04	MW-3-20240709	Bromomethane		Low	Low			
VOA	24G0588-04	MW-3-20240709	Naphthalene	Low		high			
VOA	24G0588-04	MW-3-20240709	Tetrachloroethylene	Low		Low			
VOA	24G0588-05	MW-6-20240709	1,2,3-Trichlorobenzene			high			
VOA	24G0588-05	MW-6-20240709	1,2-Dibromo-3-chloropropane			high			
VOA	24G0588-05	MW-6-20240709	Acetone	high					
VOA	24G0588-05	MW-6-20240709	Bromomethane		Low	Low			
VOA	24G0588-05	MW-6-20240709	Naphthalene	Low		high			
VOA	24G0588-05	MW-6-20240709	Tetrachloroethylene	Low		Low			
VOA	24G0588-06	Dup-20240709	1,2,3-Trichlorobenzene			high			
VOA	24G0588-06	Dup-20240709	1,2-Dibromo-3-chloropropane			high			
VOA	24G0588-06	Dup-20240709	Acetone	high					
VOA	24G0588-06	Dup-20240709	Bromomethane		Low	Low			
VOA	24G0588-06	Dup-20240709	Naphthalene	Low		high			
VOA	24G0588-06	Dup-20240709	Tetrachloroethylene	Low		Low			
VOA	24G0588-07	Trip Blank-20240709	1,2,3-Trichlorobenzene			high			
VOA	24G0588-07	Trip Blank-20240709	1,2-Dibromo-3-chloropropane			high			
VOA	24G0588-07	Trip Blank-20240709	Acetone	high					
VOA	24G0588-07	Trip Blank-20240709	Bromomethane		Low	Low			
VOA	24G0588-07	Trip Blank-20240709	Naphthalene	Low		high			
VOA	24G0588-07	Trip Blank-20240709	Tetrachloroethylene	Low		Low			

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
VHB-MW-01-20240709	EPA 1633 Draft 3	24G0588-01	Water	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	J
VHB-MW-01-20240709	EPA 1633 Draft 3	24G0588-01	Water	d9-N-EtFOSE	PFSu-L
VHB-MW-01-20240709	EPA 1633 Draft 3	24G0588-01	Water	d-N-EtFOSA	PFSu-L
VHB-MW-01-20240709	EPA 1633 Draft 3	24G0588-01	Water	Perfluorododecanesulfonic acid (PFDoS)	PF-CCV-L
VHB-MW-01-20240709	EPA 1633 Draft 3	24G0588-01	Water	Perfluorononanoic acid (PFNA)	J
	EPA 1633 Draft 3	24G0588-02RE1	Water	d-N-EtFOSA	PFSu-L
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluoro-1-heptanesulfonic acid (PFHpS)	J
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluorobutanesulfonic acid (PFBS)	J
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluorohexanoic acid (PFHxA)	J
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluoro-n-butanoic acid (PFBA)	J
	EPA 1633 Draft 3	24G0588-02RE1	Water	Perfluoropentanoic acid (PFPeA)	J
	EPA 1633 Draft 3	24G0588-03	Water	Perfluorododecanesulfonic acid (PFDoS)	PF-CCV-L
	EPA 1633 Draft 3	24G0588-03	Water	Perfluorononanoic acid (PFNA)	J
	EPA 1633 Draft 3	24G0588-04RE1	Water	d-N-EtFOSA	PFSu-L
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluoro-1-heptanesulfonic acid (PFHpS)	J
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluorohexanoic acid (PFHxA)	J
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluoro-n-butanoic acid (PFBA)	J
	EPA 1633 Draft 3	24G0588-04RE1	Water	Perfluoropentanoic acid (PFPeA)	J
	EPA 1633 Draft 3	24G0588-05	Water	d9-N-EtFOSE	PFSu-L
MW-6-20240709	EPA 1633 Draft 3	24G0588-05	Water	M2-4:2 FTS	PFSu-H
MW-6-20240709	EPA 1633 Draft 3	24G0588-05	Water	Perfluoro-1-pentanesulfonate (PFPeS)	J

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
MW-6-20240709	EPA 1633 Draft 3	24G0588-05	Water	Perfluorododecanesulfonic acid (PFDoS)	PF-CCV-L
MW-6-20240709	EPA 1633 Draft 3	24G0588-05	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-L
MW-6-20240709	EPA 1633 Draft 3	24G0588-05	Water	Perfluorononanoic acid (PFNA)	J
Dup-20240709	EPA 1633 Draft 3	24G0588-06	Water	d-N-EtFOSA	PFSu-L
Dup-20240709	EPA 1633 Draft 3	24G0588-06	Water	M2-4:2 FTS	PFSu-H
Dup-20240709	EPA 1633 Draft 3	24G0588-06	Water	Perfluorododecanesulfonic acid (PFDoS)	PF-CCV-L
Dup-20240709	EPA 1633 Draft 3	24G0588-06	Water	Perfluorononanoic acid (PFNA)	J
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Acetone	ICVE
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Acetone	CAL-E
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Bromomethane	QL-02
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Bromomethane	CCVE
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Naphthalene	ICVE20
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Tetrachloroethylene	ICVE
VHB-MW-01-20240709	EPA 8260C	24G0588-01	Water	Tetrachloroethylene	QL-02
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Acetone	CAL-E
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Bromomethane	CCVE
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Bromomethane	QL-02
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Naphthalene	ICVE20
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Tetrachloroethylene	ICVE
MW-1R-20240709	EPA 8260C	24G0588-03	Water	Tetrachloroethylene	QL-02
MW-3-20240709	EPA 8260C	24G0588-04	Water	Acetone	CAL-E
MW-3-20240709	EPA 8260C	24G0588-04	Water	Bromomethane	QL-02
MW-3-20240709	EPA 8260C	24G0588-04	Water	Bromomethane	CCVE
MW-3-20240709	EPA 8260C	24G0588-04	Water	Naphthalene	ICVE20
MW-3-20240709	EPA 8260C	24G0588-04	Water	Tetrachloroethylene	QL-02
MW-3-20240709	EPA 8260C	24G0588-04	Water	Tetrachloroethylene	ICVE
MW-6-20240709	EPA 8260C	24G0588-05	Water	Acetone	CAL-E
MW-6-20240709	EPA 8260C	24G0588-05	Water	Bromomethane	QL-02
MW-6-20240709	EPA 8260C	24G0588-05	Water	Bromomethane	CCVE
MW-6-20240709	EPA 8260C	24G0588-05	Water	Naphthalene	ICVE20
MW-6-20240709	EPA 8260C	24G0588-05	Water	Tetrachloroethylene	ICVE
MW-6-20240709	EPA 8260C	24G0588-05	Water	Tetrachloroethylene	QL-02
Dup-20240709	EPA 8260C	24G0588-06	Water	Acetone	CAL-E
Dup-20240709	EPA 8260C	24G0588-06	Water	Bromomethane	CCVE
Dup-20240709	EPA 8260C	24G0588-06	Water	Bromomethane	QL-02
Dup-20240709	EPA 8260C	24G0588-06	Water	Naphthalene	ICVE20
Dup-20240709	EPA 8260C	24G0588-06	Water	Tetrachloroethylene	QL-02
Dup-20240709	EPA 8260C	24G0588-06	Water	Tetrachloroethylene	ICVE
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Acetone	CAL-E
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Bromomethane	CCVE

York Analytical Work Order Narrative

Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Bromomethane	QL-02
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Naphthalene	ICVE20
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Tetrachloroethylene	ICVE
Trip Blank-20240709	EPA 8260C	24G0588-07	Water	Tetrachloroethylene	QL-02
	EPA 8260C	S4F1027-SCV1	Water	Acetone	ICVE20
	EPA 8260C	S4F1027-SCV1	Water	Naphthalene	ICVE20
	EPA 8260C	S4F1027-SCV1	Water	Tetrachloroethylene	ICVE20
VHB-MW-01-20240709	EPA 8270D SIM	24G0588-01	Water	Chrysene	ICVE20
MW-1R-20240709	EPA 8270D SIM	24G0588-03	Water	Chrysene	ICVE20
MW-3-20240709	EPA 8270D SIM	24G0588-04	Water	Chrysene	ICVE20
MW-6-20240709	EPA 8270D SIM	24G0588-05	Water	Naphthalene	B
Dup-20240709	EPA 8270D SIM	24G0588-06	Water	Acenaphthene	B
Dup-20240709	EPA 8270D SIM	24G0588-06	Water	Acenaphthylene	B
Dup-20240709	EPA 8270D SIM	24G0588-06	Water	Chrysene	ICVE20
Dup-20240709	EPA 8270D SIM	24G0588-06	Water	Naphthalene	B
	EPA 8270D SIM	BG40948-BS2	Water	Acenaphthene	B
	EPA 8270D SIM	BG40948-BS2	Water	Acenaphthylene	B
	EPA 8270D SIM	BG40948-BS2	Water	Naphthalene	B
	EPA 8270D SIM	BG40948-BSD1	Water	Acenaphthene	B
	EPA 8270D SIM	BG40948-BSD1	Water	Acenaphthylene	B
	EPA 8270D SIM	BG40948-BSD1	Water	Naphthalene	B
	EPA 8270D SIM	S4G1716-SCV1	Water		ICVE
	EPA 8270D SIM	S4G1716-SCV1	Water	Benzo(a)anthracene	ICVE20
	EPA 8270D SIM	S4G1716-SCV1	Water	Chrysene	ICVE20

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<u>Qualifier Definitions :</u>	
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
CAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
PF-CCV-L	The CCV recovery for this PFAS compound was below control limits.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP LOW MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SF40012

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SF40012	S4F1027	S4F1027	Secondary Cal Check	S4F1027-SCV1	VOA No. 10	V10C05106.D
SF40012	S4G1207	S4G1207	Calibration Check	S4G1207-CCV1	VOA No. 10	V10C05784.D
SF40012	BG40737	S4G1207	LCS	BG40737-BS1	VOA No. 10	V10C05785.D
SF40012	BG40737	S4G1207	LCS Dup	BG40737-BSD1	VOA No. 10	V10C05786.D
SF40012	BG40737	S4G1207	Blank	BG40737-BLK1	VOA No. 10	V10C05788.D
SF40012	BG40737	S4G1207	VHB-MW-01-20240709	24G0588-01	VOA No. 10	V10C05794.D
SF40012	BG40737	S4G1207	MW-1R-20240709	24G0588-03	VOA No. 10	V10C05795.D
SF40012	BG40737	S4G1207	MW-3-20240709	24G0588-04	VOA No. 10	V10C05796.D
SF40012	BG40737	S4G1207	MW-6-20240709	24G0588-05	VOA No. 10	V10C05797.D
SF40012	BG40737	S4G1207	Dup-20240709	24G0588-06	VOA No. 10	V10C05798.D
SF40012	BG40737	S4G1207	Trip Blank-20240709	24G0588-07	VOA No. 10	V10C05800.D
SF40012	S4G1216	S4G1216	Calibration Check	S4G1216-CCV1	VOA No. 10	V10C05804.D
SF40012	BG40739	S4G1216	LCS	BG40739-BS1	VOA No. 10	V10C05805.D
SF40012	BG40739	S4G1216	LCS Dup	BG40739-BSD1	VOA No. 10	V10C05806.D
SF40012	BG40739	S4G1216	Blank	BG40739-BLK1	VOA No. 10	V10C05808.D
SF40012	BG40739	S4G1216	VHB-MW-01-20240709	24G0588-01RE1	VOA No. 10	V10C05819.D

York Analytical Work Order Narrative

4.0 Analysis Issues

Initial calibration for EPA 8260C exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SF40012	VOA No. 10	6/6/2024 8:00:49 AM	V10C05091.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
1,2-Dibromo-3-chloropropane		15	0.0339	0.05				QR0
2-Butanone		15	0.0472	0.05				QR0
Acetone		15			0.98835	out		QR0
Tetrahydrofuran		15	0.0352	0.05				QR0

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4F1027-SCV1		V10C05106.D
Calibration Check	S4G1207-CCV1		V10C05784.D
LCS	BG40737-BS1		V10C05785.D
LCS Dup	BG40737-BSD1		V10C05786.D
Blank	BG40737-BLK1		V10C05788.D
VHB-MW-01-20240709	24G0588-01		V10C05794.D
MW-1R-20240709	24G0588-03		V10C05795.D
MW-3-20240709	24G0588-04		V10C05796.D
MW-6-20240709	24G0588-05		V10C05797.D
Dup-20240709	24G0588-06		V10C05798.D
Trip Blank-20240709	24G0588-07		V10C05800.D
Calibration Check	S4G1216-CCV1		V10C05804.D
LCS	BG40739-BS1		V10C05805.D
LCS Dup	BG40739-BSD1		V10C05806.D
Blank	BG40739-BLK1		V10C05808.D

York Analytical Work Order Narrative

EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SF40012	S4F1027-SCV1	Acetone	10.0	67.2	672	80 - 120
SF40012	S4F1027-SCV1	Naphthalene	10.0	7.81	78.1	80 - 120
SF40012	S4F1027-SCV1	Tetrachloroethylene	10.0	5.78	57.8	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4G1207-CCV1	Calibration Check	V10C05784.D
BG40737-BS1	LCS	V10C05785.D
BG40737-BSD1	LCS Dup	V10C05786.D
BG40737-BLK1	Blank	V10C05788.D
24G0588-01	VHB-MW-01-20240709	V10C05794.D
24G0588-03	MW-1R-20240709	V10C05795.D
24G0588-04	MW-3-20240709	V10C05796.D
24G0588-05	MW-6-20240709	V10C05797.D
24G0588-06	Dup-20240709	V10C05798.D
24G0588-07	Trip Blank-20240709	V10C05800.D
S4G1216-CCV1	Calibration Check	V10C05804.D
BG40739-BS1	LCS	V10C05805.D
BG40739-BSD1	LCS Dup	V10C05806.D
BG40739-BLK1	Blank	V10C05808.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SF40012	S4G1207	S4G1207-CCV1	V10C05784.D	07/11/24 09:23
SF40012	S4G1216	S4G1216-CCV1	V10C05804.D	07/12/24 09:25

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SF40012	S4G1207-CCV1	Bromomethane	ug/L	3.06	10.0	30.6	70 130	V10C05784.D
SF40012	S4G1216-CCV1	1,1-Dichloroethylene	ug/L	7.84	10.0	78.4	80 120	V10C05804.D
SF40012	S4G1216-CCV1	Bromomethane	ug/L	2.63	10.0	26.3	70 130	V10C05804.D
SF40012	S4G1216-CCV1	Carbon disulfide	ug/L	5.74	10.0	57.4	70 130	V10C05804.D
SF40012	S4G1216-CCV1	Chloromethane	ug/L	5.56	10.0	55.6	70 130	V10C05804.D
SF40012	S4G1216-CCV1	Dichlorodifluoromethane	ug/L	6.84	10.0	68.4	70 130	V10C05804.D
SF40012	S4G1216-CCV1	Vinyl Chloride	ug/L	6.45	10.0	64.5	80 120	V10C05804.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SF40012	S4G1207	BG40737-BS1	LCS		V10C05785.D
SF40012	S4G1207	BG40737-BSD1	LCS Dup		V10C05786.D
SF40012	S4G1207	BG40737-BLK1	Blank		V10C05788.D
SF40012	S4G1207	24G0588-01	VHB-MW-01-2024070		V10C05794.D
SF40012	S4G1207	24G0588-03	MW-1R-20240709		V10C05795.D
SF40012	S4G1207	24G0588-04	MW-3-20240709		V10C05796.D
SF40012	S4G1207	24G0588-05	MW-6-20240709		V10C05797.D
SF40012	S4G1207	24G0588-06	Dup-20240709		V10C05798.D
SF40012	S4G1207	24G0588-07	Trip Blank-20240709		V10C05800.D

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SF40012	S4G1216	BG40739-BS1	LCS	V10C05805.D
SF40012	S4G1216	BG40739-BSD1	LCS Dup	V10C05806.D
SF40012	S4G1216	BG40739-BLK1	Blank	V10C05808.D

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BG40737	S4G1207	VOA No. 10	BG40737-BLK1	V10C05788.D
VOA	BG40739	S4G1216	VOA No. 10	BG40739-BLK1	V10C05808.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SF40012	4G1207	BG40737-BS1	LCS	V10C05785.D
SF40012	4G1207	BG40737-BSD1	LCS Dup	V10C05786.D
SF40012	4G1216	BG40739-BS1	LCS	V10C05805.D
SF40012	4G1216	BG40739-BSD1	LCS Dup	V10C05806.D

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G1207	LCS	BG40737-BS1	1,2,3-Trichlorobenzene		132		70 - 130	
S4G1207	LCS	BG40737-BS1	Bromomethane		40.4		70 - 130	
S4G1207	LCS	BG40737-BS1	Tetrachloroethylene		62.4		70 - 130	
S4G1207	LCS Dup	BG40737-BSD1	1,2,3-Trichlorobenzene	132	154	15.5	70 - 130	30
S4G1207	LCS Dup	BG40737-BSD1	1,2-Dibromo-3-chloropropane	119	132	10.3	70 - 130	30
S4G1207	LCS Dup	BG40737-BSD1	Bromomethane	40.4	45.2	11.2	70 - 130	30
S4G1207	LCS Dup	BG40737-BSD1	Naphthalene	129	152	16	70 - 130	30
S4G1207	LCS Dup	BG40737-BSD1	Tetrachloroethylene	62.4	60.6	2.93	70 - 130	30
S4G1216	LCS	BG40739-BS1	Acetone		62.1		70 - 130	
S4G1216	LCS	BG40739-BS1	Bromomethane		49.6		70 - 130	
S4G1216	LCS	BG40739-BS1	Tetrachloroethylene		55.8		70 - 130	
S4G1216	LCS Dup	BG40739-BSD1	1,2,3-Trichlorobenzene	117	137	15.9	70 - 130	30
S4G1216	LCS Dup	BG40739-BSD1	Bromomethane	49.6	57.9	15.4	70 - 130	30
S4G1216	LCS Dup	BG40739-BSD1	Chloromethane	76.2	69.1	9.77	70 - 130	30
S4G1216	LCS Dup	BG40739-BSD1	Naphthalene	112	133	17	70 - 130	30
S4G1216	LCS Dup	BG40739-BSD1	Tetrachloroethylene	55.8	52.7	5.71	70 - 130	30

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BG40737	24G0588-01	VHB-MW-01-202407	
BG40737	24G0588-03	MW-1R-20240709	
BG40737	24G0588-04	MW-3-20240709	
BG40737	24G0588-05	MW-6-20240709	
BG40737	24G0588-06	Dup-20240709	
BG40737	24G0588-07	Trip Blank-20240709	
BG40737	BG40737-BLK1	Blank	
BG40739	BG40739-BLK1	Blank	

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EPA 8260C

Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
EPA 8260C	BG40739	VHB-MW-01-20240709	24G0588-01RE1	10

EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270E SIM

Semi-Volatiles, 1,4-Dioxane 8270 SIM-Aqueous

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SC40048

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SC40048	S4C2634	S4C2634	Secondary Cal Check	S4C2634-SCV1	MSBNA8	E800075660.D
SC40048	S4G1402	S4G1402	Calibration Check	S4G1402-CCV1	MSBNA8	E800077219.D
SC40048	BG40729	S4G1402	Blank	BG40729-BLK1	MSBNA8	E800077220.D
SC40048	BG40729	S4G1402	LCS	BG40729-BS1	MSBNA8	E800077221.D
SC40048	S4G1402	S4G1402	Calibration Check	S4G1402-CCV2	MSBNA8	E800077230.D
SC40048	BG40729	S4G1402	MW-1R-20240709	24G0588-03	MSBNA8	E800077234.D
SC40048	BG40729	S4G1402	MW-3-20240709	24G0588-04	MSBNA8	E800077235.D
SC40048	BG40729	S4G1402	MW-6-20240709	24G0588-05	MSBNA8	E800077236.D
SC40048	BG40729	S4G1402	Dup-20240709	24G0588-06	MSBNA8	E800077237.D
SC40048	S4G1402	S4G1402	Calibration Check	S4G1402-CCV3	MSBNA8	E800077238.D

Initial calibration for EPA 8270E SIM met method guidelines.

EPA 8270E SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270E SIM

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SC40048	S4G1402	S4G1402-CCV1	E800077219.D	07/12/24 11:32
SC40048	S4G1402	S4G1402-CCV2	E800077230.D	07/12/24 14:58
SC40048	S4G1402	S4G1402-CCV3	E800077238.D	07/12/24 17:20

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 8270E SIM

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BG40729	S4G1402	MSBNA8	BG40729-BLK1	E800077220.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SC40048	4G1402	BG40729-BS1	LCS	E800077221.D

EPA 8270E SIM

Dilutions: No sample dilutions were required.

EPA 8270E SIM

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D SIM SIM Analysis

SVOA, 8270 SIM RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SF40033

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SF40033	S4F2524	S4F2524	Secondary Cal Check	S4F2524-SCV1	BNA #5	SV521687.D
SF40033	S4G1625	S4G1625	Calibration Check	S4G1625-CCV1	BNA #5	SV521989.D
SF40033	BG40948	S4G1625	Blank	BG40948-BLK2	BNA #5	SV521990.D
SF40033	BG40948	S4G1625	LCS	BG40948-BS2	BNA #5	SV521991.D

Initial calibration for EPA 8270D SIM met method guidelines.

EPA 8270D SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D SIM

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SF40033	S4F2524-SCV1	Acenaphthene	1.00	0.770	77.0	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4G1625-CCV1	Calibration Check	SV521989.D
BG40948-BS2	LCS	SV521991.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SF40033	S4G1625	S4G1625-CCV1	SV521989.D	07/16/24 11:02

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 8270D SIM

SIM Analysis

Batch QC

Method Blank-

	Batch	Sequence	Instrument	Blank	FileID			
SVOA	BG40948	S4G1625	BNA #5	BG40948-BLK2	SV521990.D			
Sequence	SampleName	LabNumber	Matrix	Analyte	Result	MRL	RptUnits	
S4G1625	Blank	BG40948-BLK2	Water	Acenaphthene	0.0500	0.0500	ug/L	
S4G1625	Blank	BG40948-BLK2	Water	Acenaphthylene	0.0500	0.0500	ug/L	
S4G1625	Blank	BG40948-BLK2	Water	Naphthalene	0.110	0.0500	ug/L	

The following QC and or client samples had positive(s) in associated blanks:

Batch	LabNumber	SampleName	File ID
BG40948	BG40948-BS2	LCS	SV521991.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SF40033	4G1625	BG40948-BS2	LCS	SV521991.D				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G1625	LCS	BG40948-BS2	Fluoranthene		149		40 - 140	

EPA 8270D SIM

SIM Analysis

Dilutions: No sample dilutions were required.

EPA 8270D SIM

SIM Analysis

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D

SVOA, 8270 LOW RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SF40034

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SF40034	S4F2609	S4F2609	Secondary Cal Check	S4F2609-SCV1	BNA #3	SV303402.D
SF40034	S4G1714	S4G1714	Calibration Check	S4G1714-CCV1	BNA #3	SV303627.D
SF40034	BG40948	S4G1714	VHB-MW-01-20240709	24G0588-01	BNA #3	SV303628.D
SF40034	BG40948	S4G1714	MW-1R-20240709	24G0588-03	BNA #3	SV303629.D
SF40034	BG40948	S4G1714	MW-3-20240709	24G0588-04	BNA #3	SV303630.D
SF40034	BG40948	S4G1714	Dup-20240709	24G0588-06	BNA #3	SV303631.D
SF40034	BG40948	S4G1714	MW-6-20240709	24G0588-05	BNA #3	SV303637.D

Initial calibration for EPA 8270D exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SF40034	BNA #3	6/25/2024 10:15:51 AM	SV303393.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
2,4-Dinitrophenol	32.04	15						Avg
2,4-Dinitrotoluene	21.72	15						Avg
2,6-Dinitrotoluene	17.22	15						Avg
3,3-Dichlorobenzidine	15.23	15						Avg
3-Nitroaniline	16.56	15						Avg
4,6-Dinitro-2-methylphenol	36.53	15						Avg
4-Nitroaniline	18.10	15						Avg
Di-n-octyl phthalate	19.30	15						Avg
Pentachloronitrobenzene	15.01	15						Avg
Pyridine	19.87	15						Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Calibration Check	S4G1714-CCV1		SV303627.D

York Analytical Work Order Narrative

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SF40034	S4G1714	S4G1714-CCV1	SV303627.D	07/16/24 11:33

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SF40034	S4G1714-CCV1	2,4-Dinitrophenol	ug/mL	44.4	30.0	148	70 130	SV303627.D
SF40034	S4G1714-CCV1	2-Methylphenol	ug/mL	15.6	30.0	51.9	70 130	SV303627.D
SF40034	S4G1714-CCV1	4,6-Dinitro-2-methylphenol	ug/mL	48.9	30.0	163	70 130	SV303627.D
SF40034	S4G1714-CCV1	4-Nitrophenol	ug/mL	1.39	30.0	4.63	70 130	SV303627.D
SF40034	S4G1714-CCV1	Aniline	ug/mL	43.2	30.0	144	70 130	SV303627.D
SF40034	S4G1714-CCV1	Bis(2-chloroethyl)ether	ug/mL	62.2	30.0	207	70 130	SV303627.D

The following QC and or client samples were affected:

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

EPA 8270D

Dilutions: No sample dilutions were required.

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D

SVOA, 8270 LOW RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SG40005

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SG40005	S4G0127	S4G0127	Secondary Cal Check	S4G0127-SCV1	BNA #4	SV4416892.D
SG40005	S4G1616	S4G1616	Calibration Check	S4G1616-CCV1	BNA #4	SV4417078.D
SG40005	BG40948	S4G1616	Blank	BG40948-BLK1	BNA #4	SV4417081.D
SG40005	BG40948	S4G1616	LCS	BG40948-BS1	BNA #4	SV4417082.D
SG40005	BG40948	S4G1616	LCS Dup	BG40948-BSD1	BNA #4	SV4417083.D

Initial calibration for EPA 8270D met method guidelines.

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SG40005	S4G1616	S4G1616-CCV1	SV4417078.D	07/16/24 08:52

The continuing calibration verification recovered within method limits.

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BG40948	S4G1616	BNA #4	BG40948-BLK1	SV4417081.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SG40005	4G1616	BG40948-BS1	LCS	SV4417082.D
SG40005	4G1616	BG40948-BSD1	LCS Dup	SV4417083.D

York Analytical Work Order Narrative

EPA 8270D

Dilutions: No sample dilutions were required.

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D SIM SIM Analysis

SVOA, 8270 SIM RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SG40005**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SG40005	BG40948	S4G1616	Blank	BG40948-BLK1	BNA #4	SV4417081.D
SG40005	BG40948	S4G1616	LCS Dup	BG40948-BSD1	BNA #4	SV4417083.D

Initial calibration for EPA 8270D SIM met method guidelines.

EPA 8270D SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D SIM

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 8270D SIM

SIM Analysis

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BG40948	S4G1616	BNA #4	BG40948-BLK1	SV4417081.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SG40005	4G1616	BG40948-BSD1	LCS Dup	SV4417083.D				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G1616	LCS Dup	BG40948-BSD1	Acenaphthene		73.4		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Acenaphthylene		71.4		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Anthracene		82.5		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Benzo(a)anthracene		86.8		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Benzo(a)pyrene		86.5		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Benzo(b)fluoranthene		86.8		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Benzo(g,h,i)perylene		88.2		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Benzo(k)fluoranthene		89.2		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Chrysene		87		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Dibenzo(a,h)anthracene		90		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Fluoranthene		81.6		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Fluorene		77.9		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Indeno(1,2,3-cd)pyrene		96.8		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Naphthalene		74.5		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Phenanthrene		81.4		40 - 140	20
S4G1616	LCS Dup	BG40948-BSD1	Pyrene		80.8		40 - 140	20

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BG40948	BG40948-BLK1	Blank	

EPA 8270D SIM

SIM Analysis

Dilutions: No sample dilutions were required.

EPA 8270D SIM

SIM Analysis

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 8270D SIM SIM Analysis

SVOA, 8270 SIM RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SG40030**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SG40030	S4G1716	S4G1716	Secondary Cal Check	S4G1716-SCV1	BNA #4	SV4417102.D
SG40030	S4G1727	S4G1727	Calibration Check	S4G1727-CCV1	BNA #4	SV4417107.D
SG40030	BG40948	S4G1727	VHB-MW-01-20240709	24G0588-01	BNA #4	SV4417111.D
SG40030	BG40948	S4G1727	MW-1R-20240709	24G0588-03	BNA #4	SV4417112.D
SG40030	BG40948	S4G1727	MW-3-20240709	24G0588-04	BNA #4	SV4417113.D
SG40030	BG40948	S4G1727	Dup-20240709	24G0588-06	BNA #4	SV4417114.D
SG40030	BG40948	S4G1727	MW-6-20240709	24G0588-05	BNA #4	SV4417117.D

Initial calibration for **EPA 8270D SIM** met method guidelines.

EPA 8270D SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D SIM

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SG40030	S4G1716-SCV1	Chrysene	1.00	0.790	79.0	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4G1727-CCV1	Calibration Check	SV4417107.D
24G0588-01	VHB-MW-01-20240709	SV4417111.D
24G0588-03	MW-1R-20240709	SV4417112.D
24G0588-04	MW-3-20240709	SV4417113.D
24G0588-06	Dup-20240709	SV4417114.D
24G0588-05	MW-6-20240709	SV4417117.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SG40030	S4G1727	S4G1727-CCV1	SV4417107.D	07/17/24 11:19

The continuing calibration verification recovered within method limits.

York Analytical Work Order Narrative

EPA 8270D SIM

SIM Analysis

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

EPA 8270D SIM

SIM Analysis

Dilutions: No sample dilutions were required.

EPA 8270D SIM

SIM Analysis

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 1633 Draft 3

PFAS, EPA 1633 Target List

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **SF40019**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SF40019	S4F1245	S4F1245	Secondary Cal Check	S4F1245-SCV1	LCQQQ	QQQ40103.d
SF40019	S4G1746	S4G1746	Calibration Check	S4G1746-CCV1	LCQQQ	QQQ41663.d
SF40019	S4G1746	S4G1746	Calibration Blank	S4G1746-CCB1	LCQQQ	QQQ41666.d
SF40019	BG40970	S4G1746	Blank	BG40970-BLK1	LCQQQ	QQQ41668.d
SF40019	BG40970	S4G1746	LCS	BG40970-BS1	LCQQQ	QQQ41669.d
SF40019	BG40970	S4G1746	LCS	BG40970-BS2	LCQQQ	QQQ41670.d
SF40019	S4G1746	S4G1746	Calibration Check	S4G1746-CCV2	LCQQQ	QQQ41678.d
SF40019	S4G1746	S4G1746	Calibration Blank	S4G1746-CCB2	LCQQQ	QQQ41679.d
SF40019	BG40970	S4G1746	VHB-MW-01-20240709	24G0588-01	LCQQQ	QQQ41684.d
SF40019	BG40970	S4G1746	MW-1R-20240709	24G0588-03	LCQQQ	QQQ41686.d
SF40019	BG40970	S4G1746	MW-6-20240709	24G0588-05	LCQQQ	QQQ41688.d
SF40019	BG40970	S4G1746	Dup-20240709	24G0588-06	LCQQQ	QQQ41689.d
SF40019	S4G1746	S4G1746	Calibration Check	S4G1746-CCV3	LCQQQ	QQQ41690.d
SF40019	S4G1746	S4G1746	Calibration Blank	S4G1746-CCB3	LCQQQ	QQQ41691.d
SF40019	S4G1746	S4G1746	Calibration Check	S4G1746-CCV4	LCQQQ	QQQ41693.d
SF40019	S4G1746	S4G1746	Calibration Blank	S4G1746-CCB4	LCQQQ	QQQ41694.d
SF40019	S4G1844	S4G1844	Calibration Check	S4G1844-CCV1	LCQQQ	QQQ41740.d
SF40019	S4G1844	S4G1844	Calibration Blank	S4G1844-CCB1	LCQQQ	QQQ41742.d
SF40019	BG41176	S4G1844	Blank	BG41176-BLK1	LCQQQ	QQQ41745.d
SF40019	BG41176	S4G1844	LCS	BG41176-BS1	LCQQQ	QQQ41746.d
SF40019	BG41176	S4G1844	VHB-MW-02-20240709	24G0588-02RE1	LCQQQ	QQQ41757.d
SF40019	BG41176	S4G1844	MW-3-20240709	24G0588-04RE1	LCQQQ	QQQ41758.d
SF40019	S4G1844	S4G1844	Calibration Check	S4G1844-CCV2	LCQQQ	QQQ41759.d

Initial calibration for EPA 1633 Draft 3 exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SF40019	LCQQQ	6/11/2024 8:00:34 AM	QQQ40095.d

The following QC and or client samples were affected:

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EPA 1633 Draft 3

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 1633 Draft 3

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SF40019	S4G1746	S4G1746-CCV1	QQQ41663.d	07/16/24 20:09
SF40019	S4G1746	S4G1746-CCV2	QQQ41678.d	07/17/24 00:11
SF40019	S4G1746	S4G1746-CCV3	QQQ41690.d	07/17/24 03:24
SF40019	S4G1746	S4G1746-CCV4	QQQ41693.d	07/17/24 04:13
SF40019	S4G1844	S4G1844-CCV1	QQQ41740.d	07/18/24 14:10
SF40019	S4G1844	S4G1844-CCV2	QQQ41759.d	07/18/24 19:00

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SF40019	S4G1746-CCV1	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	3.57	2.50	143	70 130	QQQ41663.d
SF40019	S4G1746-CCV1	M2-4:2 FTS	ng/mL	2.93	4.69	62.5	70 130	QQQ41663.d
SF40019	S4G1746-CCV1	d9-N-EtFOSE	ng/mL	17.3	25.0	69.3	70 130	QQQ41663.d
SF40019	S4G1746-CCV1	d7-N-MeFOSE	ng/mL	17.2	25.0	68.7	70 130	QQQ41663.d
SF40019	S4G1746-CCV2	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	3.77	2.50	151	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	0.827	1.25	66.1	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	M2PFTeDA	ng/mL	0.511	1.25	40.9	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.60	2.50	64.1	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	M2-4:2 FTS	ng/mL	2.29	4.69	48.9	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	d-N-MeFOSA	ng/mL	1.14	2.50	45.5	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	d-N-EtFOSA	ng/mL	1.06	2.50	42.6	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	d9-N-EtFOSE	ng/mL	10.7	25.0	42.7	70 130	QQQ41678.d
SF40019	S4G1746-CCV2	d7-N-MeFOSE	ng/mL	13.3	25.0	53.4	70 130	QQQ41678.d
SF40019	S4G1746-CCV3	Perfluorododecanoic acid (PFDaA)	ng/mL	3.42	2.50	137	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	3.55	2.50	142	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	1.69	2.42	69.8	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	3-Perfluoroheptyl propanoic acid (FHpPA)	ng/mL	83.1	62.6	133	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	0.719	1.25	57.5	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	M2PFTeDA	ng/mL	0.520	1.25	41.6	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.46	2.50	58.4	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	d5-N-EtFOSAA	ng/mL	3.40	5.00	68	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	M2-4:2 FTS	ng/mL	1.98	4.69	42.2	70 130	QQQ41690.d
SF40019	S4G1746-CCV3	d-N-MeFOSA	ng/mL	1.21	2.50	48.4	70 130	QQQ41690.d

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SF40019	S4G1746-CCV3	d-N-EtFOSA	ng/mL	1.20	2.50	48	70	130	QQQ41690.d
SF40019	S4G1746-CCV3	d9-N-EtFOSE	ng/mL	10.8	25.0	43.1	70	130	QQQ41690.d
SF40019	S4G1746-CCV3	d7-N-MeFOSE	ng/mL	12.8	25.0	51	70	130	QQQ41690.d
SF40019	S4G1746-CCV4	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	3.56	2.50	142	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	M2PFTeDA	ng/mL	0.611	1.25	48.9	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.47	2.50	58.8	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	M2-4:2 FTS	ng/mL	1.92	4.69	41	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	d-N-MeFOSA	ng/mL	1.21	2.50	48.5	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	d-N-EtFOSA	ng/mL	1.15	2.50	45.9	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	d9-N-EtFOSE	ng/mL	11.2	25.0	44.7	70	130	QQQ41693.d
SF40019	S4G1746-CCV4	d7-N-MeFOSE	ng/mL	13.5	25.0	54.1	70	130	QQQ41693.d
SF40019	S4G1844-CCV1	Perfluorooctanoic acid (PFOA)	ng/mL	3.41	2.50	137	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	3.52	2.50	141	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	0.855	1.25	68.4	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	M2PFTeDA	ng/mL	0.587	1.25	47	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.22	2.50	48.7	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	M2-4:2 FTS	ng/mL	2.46	4.69	52.6	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	d-N-MeFOSA	ng/mL	0.855	2.50	34.2	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	d-N-EtFOSA	ng/mL	0.791	2.50	31.6	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	d9-N-EtFOSE	ng/mL	9.84	25.0	39.3	70	130	QQQ41740.d
SF40019	S4G1844-CCV1	d7-N-MeFOSE	ng/mL	12.1	25.0	48.3	70	130	QQQ41740.d
SF40019	S4G1844-CCV2	M2PFTeDA	ng/mL	0.682	1.25	54.6	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	1.21	2.50	48.4	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	d5-N-EtFOSAA	ng/mL	3.43	5.00	68.5	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	M2-4:2 FTS	ng/mL	2.45	4.69	52.3	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	d-N-MeFOSA	ng/mL	0.968	2.50	38.7	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	d-N-EtFOSA	ng/mL	0.787	2.50	31.5	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	d9-N-EtFOSE	ng/mL	8.48	25.0	33.9	70	130	QQQ41759.d
SF40019	S4G1844-CCV2	d7-N-MeFOSE	ng/mL	10.4	25.0	41.6	70	130	QQQ41759.d

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SF40019	S4G1746	S4G1746-CCB1	Calibration Blank		QQQ41666.d
SF40019	S4G1746	BG40970-BLK1	Blank		QQQ41668.d
SF40019	S4G1746	BG40970-BS1	LCS		QQQ41669.d
SF40019	S4G1746	BG40970-BS2	LCS		QQQ41670.d
SF40019	S4G1746	S4G1746-CCB2	Calibration Blank		QQQ41679.d
SF40019	S4G1746	24G0588-01	VHB-MW-01-2024070		QQQ41684.d
SF40019	S4G1746	24G0588-03	MW-1R-20240709		QQQ41686.d
SF40019	S4G1746	24G0588-05	MW-6-20240709		QQQ41688.d
SF40019	S4G1746	24G0588-06	Dup-20240709		QQQ41689.d
SF40019	S4G1746	S4G1746-CCB3	Calibration Blank		QQQ41691.d
SF40019	S4G1746	S4G1746-CCB4	Calibration Blank		QQQ41694.d

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SF40019	S4G1844	S4G1844-CCB1	Calibration Blank	QQQ41742.d
SF40019	S4G1844	BG41176-BLK1	Blank	QQQ41745.d
SF40019	S4G1844	BG41176-BS1	LCS	QQQ41746.d

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Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
PFAS	BG40970	S4G1746	LCQQQ	BG40970-BLK1	QQQ41668.d
PFAS	BG41176	S4G1844	LCQQQ	BG41176-BLK1	QQQ41745.d

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SF40019	4G1746	BG40970-BS1	LCS	QQQ41669.d				
SF40019	4G1746	BG40970-BS2	LCS	QQQ41670.d				
SF40019	4G1844	BG41176-BS1	LCS	QQQ41746.d				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4G1746	LCS	BG40970-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		28.2		50 - 150	
S4G1746	LCS	BG40970-BS2	Perfluorotridecanoic acid (PFTTrDA)		181		50 - 150	
S4G1746	LCS	BG40970-BS2	Perfluoro-4-oxapentanoic acid (PFMPA)		36.9		50 - 150	
S4G1844	LCS	BG41176-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		40.3		50 - 150	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BG40970	24G0588-01	VHB-MW-01-202407	
BG41176	24G0588-02RE1	VHB-MW-02-202407	
BG40970	24G0588-03	MW-1R-20240709	
BG41176	24G0588-04RE1	MW-3-20240709	
BG40970	24G0588-05	MW-6-20240709	
BG40970	24G0588-06	Dup-20240709	
BG40970	BG40970-BLK1	Blank	
BG41176	BG41176-BLK1	Blank	

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Dilutions: No sample dilutions were required.

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Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SF40019	Blank	BG40970-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	17.7	25 - 150
SF40019	LCS	BG40970-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	9.73	25 - 150
SF40019	LCS	BG40970-BS2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	14.7	25 - 150
SF40019	VHB-MW-01-20240709	24G0588-01	d-N-EtFOSA	23.8	25 - 150
SF40019	VHB-MW-01-20240709	24G0588-01	d9-N-EtFOSE	17	25 - 150
SF40019	MW-6-20240709	24G0588-05	Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.8	25 - 150
SF40019	MW-6-20240709	24G0588-05	M2-4:2 FTS	184	25 - 150
SF40019	MW-6-20240709	24G0588-05	d9-N-EtFOSE	23.1	25 - 150
SF40019	Dup-20240709	24G0588-06	M2-4:2 FTS	193	25 - 150
SF40019	Dup-20240709	24G0588-06	d-N-EtFOSA	23.3	25 - 150
SF40019	Blank	BG41176-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	24.5	25 - 150
SF40019	LCS	BG41176-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	18.8	25 - 150
SF40019	VHB-MW-02-20240709	24G0588-02RE1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.83	25 - 150
SF40019	VHB-MW-02-20240709	24G0588-02RE1	d-N-EtFOSA	23.9	25 - 150
SF40019	MW-3-20240709	24G0588-04RE1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	3.84	25 - 150
SF40019	MW-3-20240709	24G0588-04RE1	d-N-EtFOSA	23.7	25 - 150
SF40019	Calibration Check	S4G1746-CCV1	M2-4:2 FTS	62.5	70 - 130
SF40019	Calibration Check	S4G1746-CCV1	d9-N-EtFOSE	69.3	70 - 130
SF40019	Calibration Check	S4G1746-CCV1	d7-N-MeFOSE	68.7	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	66.1	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	M2PFTeDA	40.9	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	64.1	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	M2-4:2 FTS	48.9	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	d-N-MeFOSA	45.5	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	d-N-EtFOSA	42.6	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	d9-N-EtFOSE	42.7	70 - 130
SF40019	Calibration Check	S4G1746-CCV2	d7-N-MeFOSE	53.4	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	57.5	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	M2PFTeDA	41.6	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	58.4	70 - 130

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SF40019	Calibration Check	S4G1746-CCV3	d5-N-EtFOSAA	68	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	M2-4:2 FTS	42.2	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	d-N-MeFOSA	48.4	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	d-N-EtFOSA	48	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	d9-N-EtFOSE	43.1	70 - 130
SF40019	Calibration Check	S4G1746-CCV3	d7-N-MeFOSE	51	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	M2PFTeDA	48.9	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	58.8	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	M2-4:2 FTS	41	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	d-N-MeFOSA	48.5	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	d-N-EtFOSA	45.9	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	d9-N-EtFOSE	44.7	70 - 130
SF40019	Calibration Check	S4G1746-CCV4	d7-N-MeFOSE	54.1	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	68.4	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	M2PFTeDA	47	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	48.7	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	M2-4:2 FTS	52.6	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	d-N-MeFOSA	34.2	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	d-N-EtFOSA	31.6	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	d9-N-EtFOSE	39.3	70 - 130
SF40019	Calibration Check	S4G1844-CCV1	d7-N-MeFOSE	48.3	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	M2PFTeDA	54.6	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	48.4	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	d5-N-EtFOSAA	68.5	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	M2-4:2 FTS	52.3	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	d-N-MeFOSA	38.7	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	d-N-EtFOSA	31.5	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	d9-N-EtFOSE	33.9	70 - 130
SF40019	Calibration Check	S4G1844-CCV2	d7-N-MeFOSE	41.6	70 - 130

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4.0 Analysis Issues

CT DEP ETPH

Extractable Total Petroleum Hydrocarbons (ETPH)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40030

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40030	S4A1907	S4A1907	Secondary Cal Check	S4A1907-SCV1	HP FID 3	G8009735.D
SA40030	S4G1609	S4G1609	Calibration Check	S4G1609-CCV1	HP FID 3	G8012011.D
SA40030	BG40920	S4G1609	Blank	BG40920-BLK1	HP FID 3	G8012012.D
SA40030	BG40920	S4G1609	LCS	BG40920-BS1	HP FID 3	G8012013.D
SA40030	BG40920	S4G1609	LCS Dup	BG40920-BSD1	HP FID 3	G8012014.D
SA40030	BG40920	S4G1609	MW-1R-20240709	24G0588-03	HP FID 3	G8012017.D
SA40030	BG40920	S4G1609	MW-3-20240709	24G0588-04	HP FID 3	G8012018.D
SA40030	BG40920	S4G1609	MW-6-20240709	24G0588-05	HP FID 3	G8012019.D
SA40030	BG40920	S4G1609	Dup-20240709	24G0588-06	HP FID 3	G8012020.D
SA40030	S4G1609	S4G1609	Calibration Check	S4G1609-CCV2	HP FID 3	G8012029.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV1	HP FID 3	G8012031.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV2	HP FID 3	G8012042.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV3	HP FID 3	G8012053.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV4	HP FID 3	G8012062.D
SA40030	BG41036	S4G1736	Blank	BG41036-BLK1	HP FID 3	G8012069.D
SA40030	BG41036	S4G1736	LCS	BG41036-BS1	HP FID 3	G8012070.D
SA40030	BG41036	S4G1736	LCS Dup	BG41036-BSD1	HP FID 3	G8012071.D
SA40030	BG41036	S4G1736	VHB-MW-01-20240709	24G0588-01	HP FID 3	G8012072.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV5	HP FID 3	G8012073.D
SA40030	S4G1736	S4G1736	Calibration Check	S4G1736-CCV6	HP FID 3	G8012084.D

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4.0 Analysis Issues

Initial calibration for CT DEP ETPH exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40030	HP FID 3	1/18/2024 7:03:11 AM	G8009725.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
ETPH (Extractable Total Petroleum Hydrocarbons)		15			0.93872	out		LR0

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4A1907-SCV1		G8009735.D
Calibration Check	S4G1609-CCV1		G8012011.D
Blank	BG40920-BLK1		G8012012.D
LCS	BG40920-BS1		G8012013.D
LCS Dup	BG40920-BSD1		G8012014.D
MW-1R-20240709	24G0588-03		G8012017.D
MW-3-20240709	24G0588-04		G8012018.D
MW-6-20240709	24G0588-05		G8012019.D
Dup-20240709	24G0588-06		G8012020.D
Calibration Check	S4G1609-CCV2		G8012029.D
Calibration Check	S4G1736-CCV1		G8012031.D
Calibration Check	S4G1736-CCV2		G8012042.D
Calibration Check	S4G1736-CCV3		G8012053.D
Calibration Check	S4G1736-CCV4		G8012062.D
Blank	BG41036-BLK1		G8012069.D
LCS	BG41036-BS1		G8012070.D
LCS Dup	BG41036-BSD1		G8012071.D
VHB-MW-01-20240709	24G0588-01		G8012072.D
Calibration Check	S4G1736-CCV5		G8012073.D
Calibration Check	S4G1736-CCV6		G8012084.D

York Analytical Work Order Narrative

CT DEP ETPH

Initial Calibration Verification-

The initial calibration verification for analytical method CT DEP ETPH

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40030	S4G1609	S4G1609-CCV1	G8012011.D	07/15/24 19:10
SA40030	S4G1609	S4G1609-CCV2	G8012029.D	07/16/24 06:41
SA40030	S4G1736	S4G1736-CCV1	G8012031.D	07/16/24 10:39
SA40030	S4G1736	S4G1736-CCV2	G8012042.D	07/16/24 17:42
SA40030	S4G1736	S4G1736-CCV3	G8012053.D	07/17/24 00:45
SA40030	S4G1736	S4G1736-CCV4	G8012062.D	07/17/24 06:30
SA40030	S4G1736	S4G1736-CCV5	G8012073.D	07/17/24 13:34
SA40030	S4G1736	S4G1736-CCV6	G8012084.D	07/17/24 20:37

The continuing calibration verification recovered within method limits.

CT DEP ETPH

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
GC	BG40920	S4G1609	HP FID 3	BG40920-BLK1	G8012012.D
GC	BG41036	S4G1736	HP FID 3	BG41036-BLK1	G8012069.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40030	4G1609	BG40920-BS1	LCS	G8012013.D
SA40030	4G1609	BG40920-BSD1	LCS Dup	G8012014.D
SA40030	4G1736	BG41036-BS1	LCS	G8012070.D
SA40030	4G1736	BG41036-BSD1	LCS Dup	G8012071.D

CT DEP ETPH

Dilutions: No sample dilutions were required.

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CT DEP ETPH

Internal Standards / Surrogates

Surrogate Issues: No issues were encountered.

York Analytical Work Order Narrative

4.0 Analysis Issues

EPA 7470

Mercury by 7470/7471

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : none

Samples and QC analyzed using this calibration / sequence.

Initial calibration for **EPA 7470** **met method guidelines.**

EPA 7470

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 7470

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

EPA 7470

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
none		BG40931-BS1	LCS	QBHg07142024A-054
none		BG40931-BS2	LCS	QBHg07142024A-081

EPA 7470

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

York Analytical Laboratories, Inc.

Formulae Used for Sample Calculations

1. Volatiles in Air-ppbv

C_x (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_X = \frac{(A_X)(Cis)(DF)}{(Ais)(RRF)}$$

2. Volatiles in Air-ug/m³

C_x (ug/m³)= Compound concentration in ug/m³

$$Cx \text{ (ug/m}^3\text{)} = \frac{\text{(ppbv x Molecular wt.)}}{(24.040)}$$

3. Volatile Organics (water and soil), ug/L or ug/kg

Soils/Waters	Medium Level Soils
1. Chloroform 2. Dichloromethane 3. Trichloroethylene 4. 1,1,1-Trichloroethane 5. 1,2-Dichloroethane 6. 1,1-Dichloroethene 7. 1,2-Dichloroethene 8. 1,1,2-Trichloroethane 9. 1,1,2,2-Tetrachloroethane 10. 1,1,1,2-Tetrachloroethane 11. 1,1,2,2-Tetrachloroethane 12. 1,1,2,2-Tetrachloroethane 13. 1,1,2,2-Tetrachloroethane 14. 1,1,2,2-Tetrachloroethane 15. 1,1,2,2-Tetrachloroethane 16. 1,1,2,2-Tetrachloroethane 17. 1,1,2,2-Tetrachloroethane 18. 1,1,2,2-Tetrachloroethane 19. 1,1,2,2-Tetrachloroethane 20. 1,1,2,2-Tetrachloroethane	1. Chloroform 2. Dichloromethane 3. Trichloroethylene 4. 1,1,1-Trichloroethane 5. 1,2-Dichloroethane 6. 1,1-Dichloroethene 7. 1,2-Dichloroethene 8. 1,1,2-Trichloroethane 9. 1,1,2,2-Tetrachloroethane 10. 1,1,1,2-Tetrachloroethane 11. 1,1,2,2-Tetrachloroethane 12. 1,1,2,2-Tetrachloroethane 13. 1,1,2,2-Tetrachloroethane 14. 1,1,2,2-Tetrachloroethane 15. 1,1,2,2-Tetrachloroethane 16. 1,1,2,2-Tetrachloroethane 17. 1,1,2,2-Tetrachloroethane 18. 1,1,2,2-Tetrachloroethane 19. 1,1,2,2-Tetrachloroethane 20. 1,1,2,2-Tetrachloroethane

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})} \quad C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

4. Semi-Volatiles (waters and soils)

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

5. Pesticides/PCB (waters and soils), DRO, CTETPH

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

C_x = concentration of analyte as ug/L or ug/kg

A_x = Area of the characteristic ion for the compound to be measured, counts.

A_{is} = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

VA = volume of MeOH aliquot for medium level soils

VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



Analytical Batch Summary

Batch ID: BG40729 **Preparation Method:** EPA 3535A **Prepared By:** moa

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-03	MW-1R-20240709	07/11/24
24G0588-04	MW-3-20240709	07/11/24
24G0588-05	MW-6-20240709	07/11/24
24G0588-06	Dup-20240709	07/11/24
BG40729-BLK1	Blank	07/11/24
BG40729-BS1	LCS	07/11/24

Batch ID: BG40737 **Preparation Method:** EPA 5030B **Prepared By:** FO

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01	VHB-MW-01-20240709	07/11/24
24G0588-03	MW-1R-20240709	07/11/24
24G0588-04	MW-3-20240709	07/11/24
24G0588-05	MW-6-20240709	07/11/24
24G0588-06	Dup-20240709	07/11/24
24G0588-07	Trip Blank-20240709	07/11/24
BG40737-BLK1	Blank	07/11/24
BG40737-BS1	LCS	07/11/24
BG40737-BSD1	LCS Dup	07/11/24

Batch ID: BG40739 **Preparation Method:** EPA 5030B **Prepared By:** FO

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01RE1	VHB-MW-01-20240709	07/11/24
BG40739-BLK1	Blank	07/12/24
BG40739-BS1	LCS	07/12/24
BG40739-BSD1	LCS Dup	07/12/24

Batch ID: BG40920 **Preparation Method:** EPA SW846-3510C Low Level **Prepared By:** JM

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-03	MW-1R-20240709	07/15/24
24G0588-04	MW-3-20240709	07/15/24
24G0588-05	MW-6-20240709	07/15/24
24G0588-06	Dup-20240709	07/15/24
BG40920-BLK1	Blank	07/15/24
BG40920-BS1	LCS	07/15/24
BG40920-BSD1	LCS Dup	07/15/24

Batch ID: BG40931 **Preparation Method:** EPA SW846-7470A **Prepared By:** PFA

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01	VHB-MW-01-20240709	07/15/24



24G0588-03	MW-1R-20240709	07/15/24
24G0588-04	MW-3-20240709	07/15/24
24G0588-05	MW-6-20240709	07/15/24
24G0588-06	Dup-20240709	07/15/24
BG40931-BLK1	Blank	07/15/24
BG40931-BLK2	Blank	07/15/24
BG40931-BS1	LCS	07/15/24
BG40931-BS2	LCS	07/15/24

Batch ID: BG40948 **Preparation Method:** EPA 3510C **Prepared By:** SHS

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01	VHB-MW-01-20240709	07/15/24
24G0588-03	MW-1R-20240709	07/15/24
24G0588-04	MW-3-20240709	07/15/24
24G0588-05	MW-6-20240709	07/15/24
24G0588-06	Dup-20240709	07/15/24
BG40948-BLK1	Blank	07/15/24
BG40948-BLK2	Blank	07/15/24
BG40948-BS1	LCS	07/15/24
BG40948-BS2	LCS	07/15/24
BG40948-BSD1	LCS Dup	07/15/24

Batch ID: BG40970 **Preparation Method:** EPA 1633 Prep **Prepared By:** K H

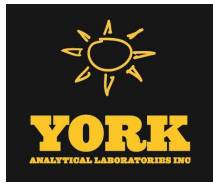
YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01	VHB-MW-01-20240709	07/15/24
24G0588-02	VHB-MW-02-20240709	07/15/24
24G0588-03	MW-1R-20240709	07/15/24
24G0588-04	MW-3-20240709	07/15/24
24G0588-05	MW-6-20240709	07/15/24
24G0588-06	Dup-20240709	07/15/24
BG40970-BLK1	Blank	07/15/24
BG40970-BS1	LCS	07/15/24
BG40970-BS2	LCS	07/15/24

Batch ID: BG41036 **Preparation Method:** EPA SW846-3510C Low Level **Prepared By:** FN

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-01	VHB-MW-01-20240709	07/16/24
BG41036-BLK1	Blank	07/16/24
BG41036-BS1	LCS	07/16/24
BG41036-BSD1	LCS Dup	07/16/24

Batch ID: BG41176 **Preparation Method:** EPA 1633 Prep **Prepared By:** K H

YORK Sample ID	Client Sample ID	Preparation Date
24G0588-02RE1	VHB-MW-02-20240709	07/18/24
24G0588-04RE1	MW-3-20240709	07/18/24



BG41176-BLK1	Blank	07/18/24
BG41176-BS1	LCS	07/18/24



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40737 - EPA 5030B

Blank (BG40737-BLK1)

Prepared & Analyzed: 07/11/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Chlorotoluene	ND	0.500	"
4-Methyl-2-pentanone	ND	0.500	"
Acetone	ND	2.00	"
Acrylonitrile	ND	0.500	"
Benzene	ND	0.500	"
Bromobenzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"
Bromoform	ND	0.500	"
Bromomethane	ND	0.500	"
Carbon disulfide	ND	0.500	"
Carbon tetrachloride	ND	0.500	"
Chlorobenzene	ND	0.500	"
Chloroethane	ND	0.500	"
Chloroform	ND	0.500	"
Chloromethane	ND	0.500	"
cis-1,2-Dichloroethylene	ND	0.500	"
cis-1,3-Dichloropropylene	ND	0.500	"
Dibromochloromethane	ND	0.500	"
Dibromomethane	ND	0.500	"
Dichlorodifluoromethane	ND	0.500	"
Ethyl Benzene	ND	0.500	"
Hexachlorobutadiene	ND	0.500	"
Isopropylbenzene	ND	0.500	"
Methyl Methacrylate	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40737 - EPA 5030B

Blank (BG40737-BLK1)

Prepared & Analyzed: 07/11/2024

Methyl tert-butyl ether (MTBE)	ND	0.500	ug/L
Methylene chloride	ND	2.00	"
Naphthalene	ND	2.00	"
n-Butylbenzene	ND	0.500	"
n-Propylbenzene	ND	0.500	"
o-Xylene	ND	0.500	"
p- & m- Xylenes	ND	1.00	"
p-Isopropyltoluene	ND	0.500	"
sec-Butylbenzene	ND	0.500	"
Styrene	ND	0.500	"
tert-Butylbenzene	ND	0.500	"
Tetrachloroethylene	ND	0.500	"
Tetrahydrofuran	ND	4.00	"
Toluene	ND	0.500	"
trans-1,2-Dichloroethylene	ND	0.500	"
trans-1,3-Dichloropropylene	ND	0.500	"
trans-1,4-dichloro-2-butene	ND	0.500	"
Trichloroethylene	ND	0.500	"
Trichlorofluoromethane	ND	0.500	"
Vinyl Chloride	ND	0.500	"

Surrogate: SURR: 1,2-Dichloroethane-d4	10.6	"	10.0	106	70-130
Surrogate: SURR: Toluene-d8	9.98	"	10.0	99.8	70-130
Surrogate: SURR: p-Bromofluorobenzene	10.2	"	10.0	102	70-130

LCS (BG40737-BS1)

Prepared & Analyzed: 07/11/2024

1,1,1,2-Tetrachloroethane	10.4	ug/L	10.0	104	70-130	
1,1,1-Trichloroethane	10.5	"	10.0	105	70-130	
1,1,2,2-Tetrachloroethane	10.0	"	10.0	100	70-130	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.4	"	10.0	104	70-130	
1,1,2-Trichloroethane	10.3	"	10.0	103	70-130	
1,1-Dichloroethane	9.93	"	10.0	99.3	70-130	
1,1-Dichloroethylene	10.8	"	10.0	108	70-130	
1,1-Dichloropropylene	10.6	"	10.0	106	70-130	
1,2,3-Trichlorobenzene	13.2	"	10.0	132	70-130	High Bias
1,2,3-Trichloropropane	11.1	"	10.0	111	70-130	
1,2,4-Trichlorobenzene	10.8	"	10.0	108	70-130	
1,2,4-Trimethylbenzene	11.4	"	10.0	114	70-130	
1,2-Dibromo-3-chloropropane	11.9	"	10.0	119	70-130	
1,2-Dibromoethane	10.5	"	10.0	105	70-130	
1,2-Dichlorobenzene	10.9	"	10.0	109	70-130	
1,2-Dichloroethane	10.4	"	10.0	104	70-130	
1,2-Dichloropropane	10.6	"	10.0	106	70-130	
1,3,5-Trimethylbenzene	11.3	"	10.0	113	70-130	
1,3-Dichlorobenzene	11.1	"	10.0	111	70-130	
1,3-Dichloropropane	10.3	"	10.0	103	70-130	
1,4-Dichlorobenzene	10.9	"	10.0	109	70-130	
2,2-Dichloropropane	10.3	"	10.0	103	70-130	
2-Butanone	9.75	"	10.0	97.5	70-130	
2-Chlorotoluene	10.9	"	10.0	109	70-130	
2-Hexanone	8.76	"	10.0	87.6	70-130	
4-Chlorotoluene	11.4	"	10.0	114	70-130	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40737 - EPA 5030B

LCS (BG40737-BS1)

Prepared & Analyzed: 07/11/2024

4-Methyl-2-pentanone	9.48		ug/L	10.0		94.8	70-130				
Acetone	7.07		"	10.0		70.7	70-130				
Acrylonitrile	10.3		"	10.0		103	70-130				
Benzene	10.6		"	10.0		106	70-130				
Bromobenzene	11.1		"	10.0		111	70-130				
Bromochloromethane	9.59		"	10.0		95.9	70-130				
Bromodichloromethane	10.7		"	10.0		107	70-130				
Bromoform	9.68		"	10.0		96.8	70-130				
Bromomethane	4.04		"	10.0		40.4	70-130	Low Bias			
Carbon disulfide	10.2		"	10.0		102	70-130				
Carbon tetrachloride	10.5		"	10.0		105	70-130				
Chlorobenzene	10.8		"	10.0		108	70-130				
Chloroethane	9.93		"	10.0		99.3	70-130				
Chloroform	10.3		"	10.0		103	70-130				
Chloromethane	9.55		"	10.0		95.5	70-130				
cis-1,2-Dichloroethylene	10.1		"	10.0		101	70-130				
cis-1,3-Dichloropropylene	10.1		"	10.0		101	70-130				
Dibromochloromethane	10.4		"	10.0		104	70-130				
Dibromomethane	10.5		"	10.0		105	70-130				
Dichlorodifluoromethane	10.6		"	10.0		106	70-130				
Ethyl Benzene	11.0		"	10.0		110	70-130				
Hexachlorobutadiene	8.66		"	10.0		86.6	70-130				
Isopropylbenzene	11.4		"	10.0		114	70-130				
Methyl Methacrylate	10.2		"	10.0		102	70-130				
Methyl tert-butyl ether (MTBE)	9.50		"	10.0		95.0	70-130				
Methylene chloride	9.06		"	10.0		90.6	70-130				
Naphthalene	12.9		"	10.0		129	70-130				
n-Butylbenzene	11.4		"	10.0		114	70-130				
n-Propylbenzene	11.2		"	10.0		112	70-130				
o-Xylene	10.8		"	10.0		108	70-130				
p- & m- Xylenes	21.7		"	20.0		109	70-130				
p-Isopropyltoluene	11.3		"	10.0		113	70-130				
sec-Butylbenzene	11.1		"	10.0		111	70-130				
Styrene	11.0		"	10.0		110	70-130				
tert-Butylbenzene	10.9		"	10.0		109	70-130				
Tetrachloroethylene	6.24		"	10.0		62.4	70-130	Low Bias			
Tetrahydrofuran	9.71		"	10.0		97.1	70-130				
Toluene	11.0		"	10.0		110	70-130				
trans-1,2-Dichloroethylene	10.4		"	10.0		104	70-130				
trans-1,3-Dichloropropylene	10.3		"	10.0		103	70-130				
trans-1,4-dichloro-2-butene	10.3		"	10.0		103	70-130				
Trichloroethylene	11.7		"	10.0		117	70-130				
Trichlorofluoromethane	10.4		"	10.0		104	70-130				
Vinyl Chloride	9.61		"	10.0		96.1	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.90		"	10.0		99.0	70-130				
Surrogate: SURR: Toluene-d8	10.1		"	10.0		101	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	Limit	Flag
Batch BG40737 - EPA 5030B											
LCS Dup (BG40737-BSD1)						Prepared & Analyzed: 07/11/2024					
1,1,1,2-Tetrachloroethane	10.4		ug/L	10.0		104	70-130		0.289	30	
1,1,1-Trichloroethane	10.2		"	10.0		102	70-130		2.03	30	
1,1,2,2-Tetrachloroethane	10.3		"	10.0		103	70-130		2.36	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2		"	10.0		102	70-130		2.82	30	
1,1,2-Trichloroethane	10.8		"	10.0		108	70-130		5.11	30	
1,1-Dichloroethane	9.77		"	10.0		97.7	70-130		1.62	30	
1,1-Dichloroethylene	10.5		"	10.0		105	70-130		2.82	30	
1,1-Dichloropropylene	10.2		"	10.0		102	70-130		3.07	30	
1,2,3-Trichlorobenzene	15.4		"	10.0		154	70-130	High Bias	15.5	30	
1,2,3-Trichloropropane	11.6		"	10.0		116	70-130		4.41	30	
1,2,4-Trichlorobenzene	11.5		"	10.0		115	70-130		6.37	30	
1,2,4-Trimethylbenzene	10.9		"	10.0		109	70-130		5.11	30	
1,2-Dibromo-3-chloropropane	13.2		"	10.0		132	70-130	High Bias	10.3	30	
1,2-Dibromoethane	11.0		"	10.0		110	70-130		4.92	30	
1,2-Dichlorobenzene	10.9		"	10.0		109	70-130		0.00	30	
1,2-Dichloroethane	10.7		"	10.0		107	70-130		3.04	30	
1,2-Dichloropropane	10.5		"	10.0		105	70-130		1.14	30	
1,3,5-Trimethylbenzene	10.9		"	10.0		109	70-130		4.14	30	
1,3-Dichlorobenzene	10.8		"	10.0		108	70-130		3.02	30	
1,3-Dichloropropane	10.7		"	10.0		107	70-130		3.90	30	
1,4-Dichlorobenzene	10.7		"	10.0		107	70-130		1.30	30	
2,2-Dichloropropane	9.98		"	10.0		99.8	70-130		3.54	30	
2-Butanone	9.73		"	10.0		97.3	70-130		0.205	30	
2-Chlorotoluene	10.4		"	10.0		104	70-130		5.16	30	
2-Hexanone	9.58		"	10.0		95.8	70-130		8.94	30	
4-Chlorotoluene	10.8		"	10.0		108	70-130		4.59	30	
4-Methyl-2-pentanone	10.2		"	10.0		102	70-130		7.71	30	
Acetone	7.58		"	10.0		75.8	70-130		6.96	30	
Acrylonitrile	11.5		"	10.0		115	70-130		11.2	30	
Benzene	10.5		"	10.0		105	70-130		1.71	30	
Bromobenzene	11.0		"	10.0		110	70-130		0.999	30	
Bromochloromethane	9.86		"	10.0		98.6	70-130		2.78	30	
Bromodichloromethane	10.7		"	10.0		107	70-130		0.748	30	
Bromoform	10.4		"	10.0		104	70-130		6.88	30	
Bromomethane	4.52		"	10.0		45.2	70-130	Low Bias	11.2	30	
Carbon disulfide	9.91		"	10.0		99.1	70-130		3.18	30	
Carbon tetrachloride	10.3		"	10.0		103	70-130		1.35	30	
Chlorobenzene	10.6		"	10.0		106	70-130		1.31	30	
Chloroethane	9.64		"	10.0		96.4	70-130		2.96	30	
Chloroform	10.3		"	10.0		103	70-130		0.292	30	
Chloromethane	8.80		"	10.0		88.0	70-130		8.17	30	
cis-1,2-Dichloroethylene	10.1		"	10.0		101	70-130		0.396	30	
cis-1,3-Dichloropropylene	10.2		"	10.0		102	70-130		1.08	30	
Dibromochloromethane	10.7		"	10.0		107	70-130		2.47	30	
Dibromomethane	10.6		"	10.0		106	70-130		1.33	30	
Dichlorodifluoromethane	10.2		"	10.0		102	70-130		3.47	30	
Ethyl Benzene	10.8		"	10.0		108	70-130		2.57	30	
Hexachlorobutadiene	8.30		"	10.0		83.0	70-130		4.25	30	
Isopropylbenzene	10.7		"	10.0		107	70-130		5.97	30	
Methyl Methacrylate	11.0		"	10.0		110	70-130		7.55	30	
Methyl tert-butyl ether (MTBE)	10.0		"	10.0		100	70-130		5.13	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40737 - EPA 5030B

LCS Dup (BG40737-BSD1)

Prepared & Analyzed: 07/11/2024

Methylene chloride	9.10		ug/L	10.0		91.0	70-130		0.441	30
Naphthalene	15.2		"	10.0		152	70-130	High Bias	16.0	30
n-Butylbenzene	10.7		"	10.0		107	70-130		6.41	30
n-Propylbenzene	10.6		"	10.0		106	70-130		5.71	30
o-Xylene	10.5		"	10.0		105	70-130		2.72	30
p- & m- Xylenes	21.1		"	20.0		106	70-130		2.89	30
p-Isopropyltoluene	10.7		"	10.0		107	70-130		5.47	30
sec-Butylbenzene	10.4		"	10.0		104	70-130		6.90	30
Styrene	10.9		"	10.0		109	70-130		1.46	30
tert-Butylbenzene	10.3		"	10.0		103	70-130		6.12	30
Tetrachloroethylene	6.06		"	10.0		60.6	70-130	Low Bias	2.93	30
Tetrahydrofuran	10.8		"	10.0		108	70-130		10.4	30
Toluene	10.6		"	10.0		106	70-130		4.08	30
trans-1,2-Dichloroethylene	10.2		"	10.0		102	70-130		1.36	30
trans-1,3-Dichloropropylene	10.4		"	10.0		104	70-130		1.06	30
trans-1,4-dichloro-2-butene	10.9		"	10.0		109	70-130		5.77	30
Trichloroethylene	11.3		"	10.0		113	70-130		3.73	30
Trichlorofluoromethane	10.2		"	10.0		102	70-130		2.82	30
Vinyl Chloride	9.28		"	10.0		92.8	70-130		3.49	30
Surrogate: SURR: 1,2-Dichloroethane-d4	10.4		"	10.0		104	70-130			
Surrogate: SURR: Toluene-d8	9.92		"	10.0		99.2	70-130			
Surrogate: SURR: p-Bromofluorobenzene	10.1		"	10.0		101	70-130			

Batch BG40739 - EPA 5030B

Blank (BG40739-BLK1)

Prepared & Analyzed: 07/12/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting	Units	Spike	Source*	%REC	%REC	Limits	Flag	RPD	
		Limit								RPD	Limit

Batch BG40739 - EPA 5030B

Blank (BG40739-BLK1)

Prepared & Analyzed: 07/12/2024

4-Chlorotoluene	ND	0.500	ug/L								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl Methacrylate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Tetrahydrofuran	ND	4.00	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
trans-1,4-dichloro-2-butene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	10.3		"	10.0		103		70-130			
Surrogate: SURR: Toluene-d8	10.1		"	10.0		101		70-130			
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103		70-130			



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40739 - EPA 5030B

LCS (BG40739-BS1)

Prepared & Analyzed: 07/12/2024

1,1,1,2-Tetrachloroethane	9.84		ug/L	10.0		98.4	70-130				
1,1,1-Trichloroethane	9.63		"	10.0		96.3	70-130				
1,1,2,2-Tetrachloroethane	10.4		"	10.0		104	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.92		"	10.0		99.2	70-130				
1,1,2-Trichloroethane	9.74		"	10.0		97.4	70-130				
1,1-Dichloroethane	9.36		"	10.0		93.6	70-130				
1,1-Dichloroethylene	9.95		"	10.0		99.5	70-130				
1,1-Dichloropropylene	9.70		"	10.0		97.0	70-130				
1,2,3-Trichlorobenzene	11.7		"	10.0		117	70-130				
1,2,3-Trichloropropane	10.4		"	10.0		104	70-130				
1,2,4-Trichlorobenzene	9.73		"	10.0		97.3	70-130				
1,2,4-Trimethylbenzene	10.7		"	10.0		107	70-130				
1,2-Dibromo-3-chloropropane	11.2		"	10.0		112	70-130				
1,2-Dibromoethane	10.1		"	10.0		101	70-130				
1,2-Dichlorobenzene	10.4		"	10.0		104	70-130				
1,2-Dichloroethane	9.96		"	10.0		99.6	70-130				
1,2-Dichloropropane	9.80		"	10.0		98.0	70-130				
1,3,5-Trimethylbenzene	10.5		"	10.0		105	70-130				
1,3-Dichlorobenzene	10.5		"	10.0		105	70-130				
1,3-Dichloropropane	9.74		"	10.0		97.4	70-130				
1,4-Dichlorobenzene	10.4		"	10.0		104	70-130				
2,2-Dichloropropane	10.2		"	10.0		102	70-130				
2-Butanone	9.85		"	10.0		98.5	70-130				
2-Chlorotoluene	10.3		"	10.0		103	70-130				
2-Hexanone	8.58		"	10.0		85.8	70-130				
4-Chlorotoluene	10.7		"	10.0		107	70-130				
4-Methyl-2-pentanone	8.93		"	10.0		89.3	70-130				
Acetone	6.21		"	10.0		62.1	70-130	Low Bias			
Acrylonitrile	9.96		"	10.0		99.6	70-130				
Benzene	9.94		"	10.0		99.4	70-130				
Bromobenzene	10.6		"	10.0		106	70-130				
Bromochloromethane	9.15		"	10.0		91.5	70-130				
Bromodichloromethane	10.0		"	10.0		100	70-130				
Bromoform	9.37		"	10.0		93.7	70-130				
Bromomethane	4.96		"	10.0		49.6	70-130	Low Bias			
Carbon disulfide	9.57		"	10.0		95.7	70-130				
Carbon tetrachloride	9.59		"	10.0		95.9	70-130				
Chlorobenzene	10.0		"	10.0		100	70-130				
Chloroethane	9.66		"	10.0		96.6	70-130				
Chloroform	9.81		"	10.0		98.1	70-130				
Chloromethane	7.62		"	10.0		76.2	70-130				
cis-1,2-Dichloroethylene	9.79		"	10.0		97.9	70-130				
cis-1,3-Dichloropropylene	9.62		"	10.0		96.2	70-130				
Dibromochloromethane	9.85		"	10.0		98.5	70-130				
Dibromomethane	9.92		"	10.0		99.2	70-130				
Dichlorodifluoromethane	8.92		"	10.0		89.2	70-130				
Ethyl Benzene	10.1		"	10.0		101	70-130				
Hexachlorobutadiene	7.62		"	10.0		76.2	70-130				
Isopropylbenzene	10.3		"	10.0		103	70-130				
Methyl Methacrylate	9.57		"	10.0		95.7	70-130				
Methyl tert-butyl ether (MTBE)	9.33		"	10.0		93.3	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40739 - EPA 5030B

LCS (BG40739-BS1)

Prepared & Analyzed: 07/12/2024

Methylene chloride	8.65		ug/L	10.0		86.5	70-130				
Naphthalene	11.2		"	10.0		112	70-130				
n-Butylbenzene	10.6		"	10.0		106	70-130				
n-Propylbenzene	10.2		"	10.0		102	70-130				
o-Xylene	9.98		"	10.0		99.8	70-130				
p- & m- Xylenes	20.0		"	20.0		100	70-130				
p-Isopropyltoluene	10.4		"	10.0		104	70-130				
sec-Butylbenzene	10.0		"	10.0		100	70-130				
Styrene	10.3		"	10.0		103	70-130				
tert-Butylbenzene	9.94		"	10.0		99.4	70-130				
Tetrachloroethylene	5.58		"	10.0		55.8	70-130	Low Bias			
Tetrahydrofuran	9.03		"	10.0		90.3	70-130				
Toluene	10.0		"	10.0		100	70-130				
trans-1,2-Dichloroethylene	9.79		"	10.0		97.9	70-130				
trans-1,3-Dichloropropylene	9.69		"	10.0		96.9	70-130				
trans-1,4-dichloro-2-butene	9.95		"	10.0		99.5	70-130				
Trichloroethylene	9.73		"	10.0		97.3	70-130				
Trichlorofluoromethane	9.92		"	10.0		99.2	70-130				
Vinyl Chloride	8.82		"	10.0		88.2	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	10.1		"	10.0		101	70-130				
Surrogate: SURR: Toluene-d8	10.0		"	10.0		100	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.4		"	10.0		104	70-130				

LCS Dup (BG40739-BS1)

Prepared & Analyzed: 07/12/2024

1,1,1,2-Tetrachloroethane	9.74		ug/L	10.0		97.4	70-130		1.02	30	
1,1,1-Trichloroethane	9.07		"	10.0		90.7	70-130		5.99	30	
1,1,2,2-Tetrachloroethane	10.8		"	10.0		108	70-130		3.96	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.05		"	10.0		90.5	70-130		9.17	30	
1,1,2-Trichloroethane	10.0		"	10.0		100	70-130		2.93	30	
1,1-Dichloroethane	8.82		"	10.0		88.2	70-130		5.94	30	
1,1-Dichloroethylene	9.23		"	10.0		92.3	70-130		7.51	30	
1,1-Dichloropropylene	8.96		"	10.0		89.6	70-130		7.93	30	
1,2,3-Trichlorobenzene	13.7		"	10.0		137	70-130	High Bias	15.9	30	
1,2,3-Trichloropropane	10.8		"	10.0		108	70-130		3.49	30	
1,2,4-Trichlorobenzene	10.7		"	10.0		107	70-130		9.87	30	
1,2,4-Trimethylbenzene	10.1		"	10.0		101	70-130		5.38	30	
1,2-Dibromo-3-chloropropane	11.5		"	10.0		115	70-130		2.46	30	
1,2-Dibromoethane	10.3		"	10.0		103	70-130		1.57	30	
1,2-Dichlorobenzene	10.3		"	10.0		103	70-130		0.386	30	
1,2-Dichloroethane	10.0		"	10.0		100	70-130		0.800	30	
1,2-Dichloropropane	9.61		"	10.0		96.1	70-130		1.96	30	
1,3,5-Trimethylbenzene	9.88		"	10.0		98.8	70-130		6.27	30	
1,3-Dichlorobenzene	10.1		"	10.0		101	70-130		3.30	30	
1,3-Dichloropropane	9.97		"	10.0		99.7	70-130		2.33	30	
1,4-Dichlorobenzene	10.0		"	10.0		100	70-130		3.53	30	
2,2-Dichloropropane	9.44		"	10.0		94.4	70-130		7.45	30	
2-Butanone	9.68		"	10.0		96.8	70-130		1.74	30	
2-Chlorotoluene	9.58		"	10.0		95.8	70-130		7.05	30	
2-Hexanone	9.44		"	10.0		94.4	70-130		9.54	30	
4-Chlorotoluene	10.1		"	10.0		101	70-130		5.69	30	
4-Methyl-2-pentanone	10.2		"	10.0		102	70-130		12.8	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40739 - EPA 5030B

LCS Dup (BG40739-BSD1)

Prepared & Analyzed: 07/12/2024

Acetone	7.08		ug/L	10.0		70.8	70-130		13.1	30	
Acrylonitrile	11.0		"	10.0		110	70-130		9.47	30	
Benzene	9.46		"	10.0		94.6	70-130		4.95	30	
Bromobenzene	10.1		"	10.0		101	70-130		4.45	30	
Bromochloromethane	9.20		"	10.0		92.0	70-130		0.545	30	
Bromodichloromethane	9.90		"	10.0		99.0	70-130		1.40	30	
Bromoform	9.82		"	10.0		98.2	70-130		4.69	30	
Bromomethane	5.79		"	10.0		57.9	70-130	Low Bias	15.4	30	
Carbon disulfide	8.83		"	10.0		88.3	70-130		8.04	30	
Carbon tetrachloride	8.88		"	10.0		88.8	70-130		7.69	30	
Chlorobenzene	9.90		"	10.0		99.0	70-130		1.40	30	
Chloroethane	9.03		"	10.0		90.3	70-130		6.74	30	
Chloroform	9.51		"	10.0		95.1	70-130		3.11	30	
Chloromethane	6.91		"	10.0		69.1	70-130	Low Bias	9.77	30	
cis-1,2-Dichloroethylene	9.25		"	10.0		92.5	70-130		5.67	30	
cis-1,3-Dichloropropylene	9.61		"	10.0		96.1	70-130		0.104	30	
Dibromochloromethane	10.1		"	10.0		101	70-130		2.70	30	
Dibromomethane	10.0		"	10.0		100	70-130		1.30	30	
Dichlorodifluoromethane	8.13		"	10.0		81.3	70-130		9.27	30	
Ethyl Benzene	9.70		"	10.0		97.0	70-130		4.24	30	
Hexachlorobutadiene	7.59		"	10.0		75.9	70-130		0.394	30	
Isopropylbenzene	9.57		"	10.0		95.7	70-130		7.73	30	
Methyl Methacrylate	10.3		"	10.0		103	70-130		7.44	30	
Methyl tert-butyl ether (MTBE)	10.0		"	10.0		100	70-130		7.13	30	
Methylene chloride	8.52		"	10.0		85.2	70-130		1.51	30	
Naphthalene	13.3		"	10.0		133	70-130	High Bias	17.0	30	
n-Butylbenzene	9.91		"	10.0		99.1	70-130		6.73	30	
n-Propylbenzene	9.47		"	10.0		94.7	70-130		7.72	30	
o-Xylene	9.76		"	10.0		97.6	70-130		2.23	30	
p- & m- Xylenes	19.2		"	20.0		95.8	70-130		4.34	30	
p-Isopropyltoluene	9.66		"	10.0		96.6	70-130		7.09	30	
sec-Butylbenzene	9.30		"	10.0		93.0	70-130		7.75	30	
Styrene	10.1		"	10.0		101	70-130		1.57	30	
tert-Butylbenzene	9.30		"	10.0		93.0	70-130		6.65	30	
Tetrachloroethylene	5.27		"	10.0		52.7	70-130	Low Bias	5.71	30	
Tetrahydrofuran	10.3		"	10.0		103	70-130		13.2	30	
Toluene	9.56		"	10.0		95.6	70-130		4.80	30	
trans-1,2-Dichloroethylene	9.08		"	10.0		90.8	70-130		7.53	30	
trans-1,3-Dichloropropylene	9.98		"	10.0		99.8	70-130		2.95	30	
trans-1,4-dichloro-2-butene	10.3		"	10.0		103	70-130		3.17	30	
Trichloroethylene	9.36		"	10.0		93.6	70-130		3.88	30	
Trichlorofluoromethane	9.05		"	10.0		90.5	70-130		9.17	30	
Vinyl Chloride	8.18		"	10.0		81.8	70-130		7.53	30	
Surrogate: SURR: 1,2-Dichloroethane-d4	10.3		"	10.0		103	70-130				
Surrogate: SURR: Toluene-d8	9.92		"	10.0		99.2	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.0		"	10.0		100	70-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40948 - EPA 3510C

Blank (BG40948-BLK1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

2-Methylnaphthalene	ND	5.00	ug/L
Acenaphthene	ND	0.0500	"
Acenaphthylene	ND	0.0500	"
Anthracene	ND	0.0500	"
Benzo(a)anthracene	ND	0.0500	"
Benzo(a)pyrene	ND	0.0500	"
Benzo(b)fluoranthene	ND	0.0500	"
Benzo(g,h,i)perylene	ND	0.0500	"
Benzo(k)fluoranthene	ND	0.0500	"
Chrysene	ND	0.0500	"
Dibenzo(a,h)anthracene	ND	0.0500	"
Fluoranthene	ND	0.0500	"
Fluorene	ND	0.0500	"
Indeno(1,2,3-cd)pyrene	ND	0.0500	"
Naphthalene	ND	0.0500	"
Phenanthrene	ND	0.0500	"
Pyrene	ND	0.0500	"

Surrogate: SURR: Nitrobenzene-d5	21.8	"	25.0	87.3	30-130
Surrogate: SURR: 2-Fluorobiphenyl	18.6	"	25.0	74.4	30-130
Surrogate: SURR: Terphenyl-d14	19.4	"	25.0	77.6	30-130

Blank (BG40948-BLK2)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Acenaphthene	0.0500	0.0500	ug/L
Acenaphthylene	0.0500	0.0500	"
Anthracene	ND	0.0500	"
Benzo(a)anthracene	ND	0.0500	"
Benzo(a)pyrene	ND	0.0500	"
Benzo(b)fluoranthene	ND	0.0500	"
Benzo(g,h,i)perylene	ND	0.0500	"
Benzo(k)fluoranthene	ND	0.0500	"
Chrysene	ND	0.0500	"
Dibenzo(a,h)anthracene	ND	0.0500	"
Fluoranthene	ND	0.0500	"
Fluorene	ND	0.0500	"
Indeno(1,2,3-cd)pyrene	ND	0.0500	"
Naphthalene	0.110	0.0500	"
Phenanthrene	ND	0.0500	"
Pyrene	ND	0.0500	"



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40948 - EPA 3510C

LCS (BG40948-BS1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

2-Methylnaphthalene	18.3	5.00	ug/L	25.0		73.0	40-140				
Surrogate: SURR: Nitrobenzene-d5	20.6		"	25.0		82.5	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	18.0		"	25.0		71.8	30-130				
Surrogate: SURR: Terphenyl-d14	18.3		"	25.0		73.3	30-130				

LCS (BG40948-BS2)

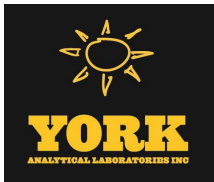
Prepared: 07/15/2024 Analyzed: 07/16/2024

Acenaphthene	0.920	0.0500	ug/L	1.00		92.0	40-140				
Acenaphthylene	1.24	0.0500	"	1.00		124	40-140				
Anthracene	1.09	0.0500	"	1.00		109	40-140				
Benzo(a)anthracene	1.09	0.0500	"	1.00		109	40-140				
Benzo(a)pyrene	1.10	0.0500	"	1.00		110	40-140				
Benzo(b)fluoranthene	1.20	0.0500	"	1.00		120	40-140				
Benzo(g,h,i)perylene	0.980	0.0500	"	1.00		98.0	40-140				
Benzo(k)fluoranthene	1.18	0.0500	"	1.00		118	40-140				
Chrysene	0.950	0.0500	"	1.00		95.0	40-140				
Dibenzo(a,h)anthracene	1.04	0.0500	"	1.00		104	40-140				
Fluoranthene	1.49	0.0500	"	1.00		149	40-140	High Bias			
Fluorene	1.16	0.0500	"	1.00		116	40-140				
Indeno(1,2,3-cd)pyrene	1.03	0.0500	"	1.00		103	40-140				
Naphthalene	0.930	0.0500	"	1.00		93.0	40-140				
Phenanthrene	1.02	0.0500	"	1.00		102	40-140				
Pyrene	0.930	0.0500	"	1.00		93.0	40-140				

LCS Dup (BG40948-BSD1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

2-Methylnaphthalene	18.4	5.00	ug/L	25.0		73.6	40-140	0.818	20		
Acenaphthene	18.4	0.0500	"	25.0		73.4	40-140	200	20	Non-dir.	
Acenaphthylene	17.8	0.0500	"	25.0		71.4	40-140	200	20	Non-dir.	
Anthracene	20.6	0.0500	"	25.0		82.5	40-140	200	20	Non-dir.	
Benzo(a)anthracene	21.7	0.0500	"	25.0		86.8	40-140	200	20	Non-dir.	
Benzo(a)pyrene	21.6	0.0500	"	25.0		86.5	40-140	200	20	Non-dir.	
Benzo(b)fluoranthene	21.7	0.0500	"	25.0		86.8	40-140	200	20	Non-dir.	
Benzo(g,h,i)perylene	22.1	0.0500	"	25.0		88.2	40-140	200	20	Non-dir.	
Benzo(k)fluoranthene	22.3	0.0500	"	25.0		89.2	40-140	200	20	Non-dir.	
Chrysene	21.8	0.0500	"	25.0		87.0	40-140	200	20	Non-dir.	
Dibenzo(a,h)anthracene	22.5	0.0500	"	25.0		90.0	40-140	200	20	Non-dir.	
Fluoranthene	20.4	0.0500	"	25.0		81.6	40-140	200	20	Non-dir.	
Fluorene	19.5	0.0500	"	25.0		77.9	40-140	200	20	Non-dir.	
Indeno(1,2,3-cd)pyrene	24.2	0.0500	"	25.0		96.8	40-140	200	20	Non-dir.	
Naphthalene	18.6	0.0500	"	25.0		74.5	40-140	200	20	Non-dir.	
Phenanthrene	20.4	0.0500	"	25.0		81.4	40-140	200	20	Non-dir.	
Pyrene	20.2	0.0500	"	25.0		80.8	40-140	200	20	Non-dir.	
Surrogate: SURR: Nitrobenzene-d5	22.6		"	25.0		90.3	30-130				
Surrogate: SURR: 2-Fluorobiphenyl	19.3		"	25.0		77.2	30-130				
Surrogate: SURR: Terphenyl-d14	20.2		"	25.0		80.6	30-130				



Semivolatile Organic Compounds by GC/MS/SIM - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40729 - EPA 3535A

Blank (BG40729-BLK1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

1,4-Dioxane	ND	0.300	ug/L								
Surrogate: 1,4-Dioxane-d8	2.36		"	4.00		58.9	36.6-118				

LCS (BG40729-BS1)

Prepared: 07/11/2024 Analyzed: 07/12/2024

1,4-Dioxane	3.42	0.300	ug/L	4.00		85.6	50-130				
Surrogate: 1,4-Dioxane-d8	2.40		"	4.00		60.0	36.6-118				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40970 - EPA 1633 Prep

Blank (BG40970-BLK1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	4.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"								
Perfluorooctanoic acid (PFOA)	ND	4.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"								
Perfluorononanoic acid (PFNA)	ND	4.00	"								
Perfluorodecanoic acid (PFDA)	ND	4.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"								
Perfluorododecanoic acid (PFDoA)	ND	4.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	4.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"								
N-MeFOSAA	ND	4.00	"								
N-EtFOSAA	ND	4.00	"								
Perfluoropentanoic acid (PFPeA)	ND	8.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	ND	15.2	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	ND	15.4	"								
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	7.12	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	8.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	ND	15.0	"								
HFPO-DA (Gen-X)	ND	16.0	"								
11CL-PF3OUdS	ND	15.1	"								
9CL-PF3ONS	ND	15.0	"								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	51.3		"	46.6		110	25-150				
Surrogate: M5PFHxA	56.0		"	50.0		112	25-150				
Surrogate: M4PFHpA	62.4		"	50.0		125	25-150				
Surrogate: M3PFHxS	55.8		"	47.4		118	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	53.2		"	50.0		106	25-150				
Surrogate: M6PFDA	26.6		"	25.0		107	25-150				
Surrogate: M7PFUdA	21.9		"	25.0		87.8	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	17.2		"	25.0		69.0	25-150				
Surrogate: M2PFTeDA	10.5		"	25.0		42.1	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40970 - EPA 1633 Prep

Blank (BG40970-BLK1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	35.3		ng/L	200		17.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	51.6		"	47.9		108	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	93.6		"	100		93.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	27.8		"	50.0		55.7	10-150				
Surrogate: d3-N-MeFOSAA	67.9		"	100		68.0	25-150				
Surrogate: d5-N-EtFOSAA	61.2		"	100		61.2	25-150				
Surrogate: M2-6:2 FTS	101		"	95.1		107	25-200				
Surrogate: M2-8:2 FTS	72.9		"	96.0		76.0	25-200				
Surrogate: M9PFNA	27.6		"	25.0		111	25-150				
Surrogate: M2-4:2 FTS	46.6		"	93.8		49.7	25-150				
Surrogate: d-N-MeFOSA	24.5		"	50.0		49.1	25-150				
Surrogate: d-N-EtFOSA	24.5		"	50.0		48.9	25-150				
Surrogate: M3HFPO-DA	232		"	200		116	25-150				
Surrogate: d9-N-EtFOSE	162		"	500		32.4	25-150				
Surrogate: d7-N-MeFOSE	211		"	500		42.2	25-150				

LCS (BG40970-BS1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Perfluorobutanesulfonic acid (PFBS)	59.6	3.54	ng/L	70.8		84.2	50-150				
Perfluorohexanoic acid (PFHxA)	68.8	4.00	"	80.0		86.0	50-150				
Perfluoroheptanoic acid (PFHpA)	78.4	4.00	"	80.0		98.1	50-150				
Perfluorohexanesulfonic acid (PFHxS)	64.2	3.66	"	73.2		87.7	50-150				
Perfluorooctanoic acid (PFOA)	77.5	4.00	"	80.0		96.9	50-150				
Perfluorooctanesulfonic acid (PFOS)	64.1	3.72	"	74.4		86.2	50-150				
Perfluorononanoic acid (PFNA)	75.0	4.00	"	80.0		93.8	50-150				
Perfluorodecanoic acid (PFDA)	65.5	4.00	"	80.0		81.9	50-150				
Perfluoroundecanoic acid (PFUnA)	60.6	4.00	"	80.0		75.8	50-150				
Perfluorododecanoic acid (PFDoA)	75.2	4.00	"	80.0		94.0	50-150				
Perfluorotridecanoic acid (PFTTrDA)	97.5	4.00	"	80.0		122	50-150				
Perfluorotetradecanoic acid (PFTA)	72.2	4.00	"	80.0		90.2	50-150				
N-MeFOSAA	68.4	4.00	"	80.0		85.5	50-150				
N-EtFOSAA	80.5	4.00	"	80.0		101	50-150				
Perfluoropentanoic acid (PFPeA)	146	8.00	"	160		91.4	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	65.3	4.00	"	80.0		81.6	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	63.8	3.82	"	76.4		83.6	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	50.8	3.86	"	77.2		65.8	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	191	15.2	"	304		62.8	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	235	15.4	"	307		76.6	50-150				
Perfluoro-n-butanoic acid (PFBA)	264	16.0	"	320		82.4	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	126	7.12	"	142		88.3	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	171	8.00	"	160		107	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	45.1	8.00	"	160		28.2	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	161	8.00	"	160		101	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	63.0	3.76	"	75.2		83.8	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	232	15.0	"	300		77.4	50-150				
HFPO-DA (Gen-X)	138	16.0	"	160		86.3	50-150				
11CL-PF3OUdS	106	15.1	"	151		70.0	50-150				
9CL-PF3ONS	123	15.0	"	150		82.3	50-150				
ADONA	132	15.1	"	151		87.1	50-150				

Low Bias





PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40970 - EPA 1633 Prep

LCS (BG40970-BS1)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Perfluorododecanesulfonic acid (PFDoS)	39.7	3.88	ng/L	77.6		51.2	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	54.8	3.84	"	76.8		71.3	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	247	10.0	"	320		77.4	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1510	50.0	"	1600		94.2	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1800	50.0	"	1600		113	50-150				
N-MeFOSE	666	40.0	"	800		83.3	50-150				
N-MeFOSA	75.9	4.00	"	80.0		95.0	50-150				
N-EtFOSE	697	40.0	"	800		87.1	50-150				
N-EtFOSA	58.4	4.00	"	80.0		73.0	50-150				
Surrogate: M3PFBS	46.9		"	46.6		101	25-150				
Surrogate: M5PFHxA	52.8		"	50.0		106	25-150				
Surrogate: M4PFHpA	59.9		"	50.0		120	25-150				
Surrogate: M3PFHxS	52.2		"	47.4		110	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	52.6		"	50.0		105	25-150				
Surrogate: M6PFDA	26.7		"	25.0		107	25-150				
Surrogate: M7PFUdA	20.7		"	25.0		82.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	16.1		"	25.0		64.4	25-150				
Surrogate: M2PFTeDA	9.62		"	25.0		38.5	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.5		"	200		9.73	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	58.3		"	47.9		122	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	81.7		"	100		81.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	29.2		"	50.0		58.5	10-150				
Surrogate: d3-N-MeFOSAA	75.7		"	100		75.8	25-150				
Surrogate: d5-N-EtFOSAA	64.9		"	100		64.9	25-150				
Surrogate: M2-6:2 FTS	104		"	95.1		109	25-200				
Surrogate: M2-8:2 FTS	81.8		"	96.0		85.2	25-200				
Surrogate: M9PFNA	26.9		"	25.0		108	25-150				
Surrogate: M2-4:2 FTS	49.0		"	93.8		52.2	25-150				
Surrogate: d-N-MeFOSA	24.2		"	50.0		48.4	25-150				
Surrogate: d-N-EtFOSA	22.3		"	50.0		44.6	25-150				
Surrogate: M3HFPO-DA	218		"	200		109	25-150				
Surrogate: d9-N-EtFOSE	173		"	500		34.6	25-150				
Surrogate: d7-N-MeFOSE	268		"	500		53.7	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40970 - EPA 1633 Prep

LCS (BG40970-BS2)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Perfluorobutanesulfonic acid (PFBS)	12.8	3.54	ng/L	14.2		90.1	50-150				
Perfluorohexanoic acid (PFHxA)	14.7	4.00	"	16.0		92.0	50-150				
Perfluoroheptanoic acid (PFHpA)	18.3	4.00	"	16.0		114	50-150				
Perfluorohexanesulfonic acid (PFHxS)	14.9	3.66	"	14.6		102	50-150				
Perfluorooctanoic acid (PFOA)	16.4	4.00	"	16.0		103	50-150				
Perfluorooctanesulfonic acid (PFOS)	15.2	3.72	"	14.9		102	50-150				
Perfluorononanoic acid (PFNA)	14.3	4.00	"	16.0		89.5	50-150				
Perfluorodecanoic acid (PFDA)	15.2	4.00	"	16.0		94.9	50-150				
Perfluoroundecanoic acid (PFUnA)	15.3	4.00	"	16.0		95.9	50-150				
Perfluorododecanoic acid (PFDoA)	16.5	4.00	"	16.0		103	50-150				
Perfluorotridecanoic acid (PFTrDA)	28.9	4.00	"	16.0		181	50-150	High Bias			
Perfluorotetradecanoic acid (PFTA)	15.5	4.00	"	16.0		97.0	50-150				
N-MeFOSAA	13.3	4.00	"	16.0		83.1	50-150				
N-EtFOSAA	16.5	4.00	"	16.0		103	50-150				
Perfluoropentanoic acid (PFPeA)	31.0	8.00	"	32.0		96.8	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	14.5	4.00	"	16.0		90.7	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	14.6	3.82	"	15.3		95.4	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	11.5	3.86	"	15.4		74.4	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	45.3	15.2	"	60.8		74.5	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	58.9	15.4	"	61.4		95.9	50-150				
Perfluoro-n-butanoic acid (PFBA)	62.5	16.0	"	64.0		97.7	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	26.9	7.12	"	28.5		94.5	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	28.9	8.00	"	32.0		90.3	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	11.8	8.00	"	32.0		36.9	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	29.7	8.00	"	32.0		93.0	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	14.3	3.76	"	15.0		95.4	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	58.0	15.0	"	60.0		96.6	50-150				
HFPO-DA (Gen-X)	28.4	16.0	"	32.0		88.8	50-150				
11CL-PF3OUdS	22.5	15.1	"	30.2		74.3	50-150				
9CL-PF3ONS	26.3	15.0	"	29.9		87.9	50-150				
ADONA	27.8	15.1	"	30.2		92.1	50-150				
Perfluorododecanesulfonic acid (PFDoS)	9.87	3.88	"	15.5		63.6	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	13.9	3.84	"	15.4		90.3	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	69.0	10.0	"	64.0		108	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	315	50.0	"	320		98.4	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	394	50.0	"	320		123	50-150				
N-MeFOSE	152	40.0	"	160		94.7	50-150				
N-MeFOSA	15.9	4.00	"	16.0		99.2	50-150				
N-EtFOSE	142	40.0	"	160		88.5	50-150				
N-EtFOSA	13.1	4.00	"	16.0		82.1	50-150				
Surrogate: M3PFBS	45.3		"	46.6		97.1	25-150				
Surrogate: M5PFHxA	52.2		"	50.0		104	25-150				
Surrogate: M4PFHpA	57.2		"	50.0		114	25-150				
Surrogate: M3PFHxS	48.4		"	47.4		102	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	46.4		"	50.0		92.9	25-150				
Surrogate: M6PFDA	23.6		"	25.0		94.2	25-150				
Surrogate: M7PFUdA	17.2		"	25.0		68.9	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	15.1		"	25.0		60.6	25-150				
Surrogate: M2PFTeDA	7.92		"	25.0		31.7	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40970 - EPA 1633 Prep

LCS (BG40970-BS2)

Prepared: 07/15/2024 Analyzed: 07/16/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	29.3		ng/L	200		14.7	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	52.2		"	47.9		109	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	103		"	100		103	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	27.9		"	50.0		55.9	10-150				
Surrogate: d3-N-MeFOSAA	77.8		"	100		77.8	25-150				
Surrogate: d5-N-EtFOSAA	65.3		"	100		65.3	25-150				
Surrogate: M2-6:2 FTS	85.1		"	95.1		89.5	25-200				
Surrogate: M2-8:2 FTS	71.8		"	96.0		74.8	25-200				
Surrogate: M9PFNA	29.4		"	25.0		117	25-150				
Surrogate: M2-4:2 FTS	39.2		"	93.8		41.8	25-150				
Surrogate: d-N-MeFOSA	21.1		"	50.0		42.1	25-150				
Surrogate: d-N-EtFOSA	19.4		"	50.0		38.8	25-150				
Surrogate: M3HFPO-DA	214		"	200		107	25-150				
Surrogate: d9-N-EtFOSE	160		"	500		31.9	25-150				
Surrogate: d7-N-MeFOSE	193		"	500		38.6	25-150				

Batch BG41176 - EPA 1633 Prep

Blank (BG41176-BLK1)

Prepared & Analyzed: 07/18/2024

Perfluorobutanesulfonic acid (PFBS)	ND	3.54	ng/L
Perfluorohexanoic acid (PFHxA)	ND	4.00	"
Perfluoroheptanoic acid (PFHpA)	ND	4.00	"
Perfluorohexanesulfonic acid (PFHxS)	ND	3.66	"
Perfluorooctanoic acid (PFOA)	ND	4.00	"
Perfluorooctanesulfonic acid (PFOS)	ND	3.72	"
Perfluorononanoic acid (PFNA)	ND	4.00	"
Perfluorodecanoic acid (PFDA)	ND	4.00	"
Perfluoroundecanoic acid (PFUnA)	ND	4.00	"
Perfluorododecanoic acid (PFDoA)	ND	4.00	"
Perfluorotridecanoic acid (PFTTrDA)	ND	4.00	"
Perfluorotetradecanoic acid (PFTA)	ND	4.00	"
N-MeFOSAA	ND	4.00	"
N-EtFOSAA	ND	4.00	"
Perfluoropentanoic acid (PFPeA)	ND	8.00	"
Perfluoro-1-octanesulfonamide (FOSA)	ND	4.00	"
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	3.82	"
Perfluoro-1-decanesulfonic acid (PFDS)	ND	3.86	"
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	15.2	"
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	15.4	"
Perfluoro-n-butanoic acid (PFBA)	ND	16.0	"
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	7.12	"
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	8.00	"
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	8.00	"
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	8.00	"
Perfluoro-1-pentanesulfonate (PFPeS)	ND	3.76	"
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	15.0	"
HFPO-DA (Gen-X)	ND	16.0	"
11CL-PF3OUdS	ND	15.1	"



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41176 - EPA 1633 Prep

Blank (BG41176-BLK1)

Prepared & Analyzed: 07/18/2024

9CL-PF3ONS	ND	15.0	ng/L								
ADONA	ND	15.1	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	3.88	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	3.84	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	10.0	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	50.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	50.0	"								
N-MeFOSE	ND	40.0	"								
N-MeFOSA	ND	4.00	"								
N-EtFOSE	ND	40.0	"								
N-EtFOSA	ND	4.00	"								
Surrogate: M3PFBS	59.7		"	46.6		128	25-150				
Surrogate: M5PFHxA	43.5		"	50.0		87.1	25-150				
Surrogate: M4PFHpA	54.6		"	50.0		109	25-150				
Surrogate: M3PFHxS	65.3		"	47.4		138	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	55.6		"	50.0		111	25-150				
Surrogate: M6PFDA	31.9		"	25.0		128	25-150				
Surrogate: M7PFUdA	21.3		"	25.0		85.3	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	22.7		"	25.0		90.8	25-150				
Surrogate: M2PFTeDA	14.5		"	25.0		57.8	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	49.0		"	200		24.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	59.5		"	47.9		124	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	90.8		"	100		90.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	24.6		"	50.0		49.3	10-150				
Surrogate: d3-N-MeFOSAA	84.8		"	100		84.8	25-150				
Surrogate: d5-N-EtFOSAA	73.0		"	100		73.0	25-150				
Surrogate: M2-6:2 FTS	129		"	95.1		135	25-200				
Surrogate: M2-8:2 FTS	116		"	96.0		121	25-200				
Surrogate: M9PFNA	31.0		"	25.0		124	25-150				
Surrogate: M2-4:2 FTS	52.0		"	93.8		55.5	25-150				
Surrogate: d-N-MeFOSA	20.8		"	50.0		41.6	25-150				
Surrogate: d-N-EtFOSA	16.1		"	50.0		32.2	25-150				
Surrogate: M3HFPO-DA	207		"	200		104	25-150				
Surrogate: d9-N-EtFOSE	167		"	500		33.4	25-150				
Surrogate: d7-N-MeFOSE	233		"	500		46.7	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41176 - EPA 1633 Prep

LCS (BG41176-BS1)

Prepared & Analyzed: 07/18/2024

Perfluorobutanesulfonic acid (PFBS)	67.8	3.54	ng/L	70.8		95.7	50-150				
Perfluorohexanoic acid (PFHxA)	78.1	4.00	"	80.0		97.7	50-150				
Perfluoroheptanoic acid (PFHpA)	80.3	4.00	"	80.0		100	50-150				
Perfluorohexanesulfonic acid (PFHxS)	67.4	3.66	"	73.2		92.1	50-150				
Perfluorooctanoic acid (PFOA)	97.4	4.00	"	80.0		122	50-150				
Perfluorooctanesulfonic acid (PFOS)	70.9	3.72	"	74.4		95.3	50-150				
Perfluorononanoic acid (PFNA)	73.7	4.00	"	80.0		92.1	50-150				
Perfluorodecanoic acid (PFDA)	78.4	4.00	"	80.0		98.1	50-150				
Perfluoroundecanoic acid (PFUnA)	70.7	4.00	"	80.0		88.4	50-150				
Perfluorododecanoic acid (PFDoA)	79.0	4.00	"	80.0		98.7	50-150				
Perfluorotridecanoic acid (PFTriDA)	95.2	4.00	"	80.0		119	50-150				
Perfluorotetradecanoic acid (PFTA)	74.6	4.00	"	80.0		93.2	50-150				
N-MeFOSAA	69.1	4.00	"	80.0		86.4	50-150				
N-EtFOSAA	85.7	4.00	"	80.0		107	50-150				
Perfluoropentanoic acid (PFPeA)	155	8.00	"	160		96.7	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	72.1	4.00	"	80.0		90.2	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	74.3	3.82	"	76.4		97.3	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	73.4	3.86	"	77.2		95.1	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	220	15.2	"	304		72.4	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	263	15.4	"	307		85.7	50-150				
Perfluoro-n-butanoic acid (PFBA)	310	16.0	"	320		96.8	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	127	7.12	"	142		89.0	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	154	8.00	"	160		96.2	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	64.5	8.00	"	160		40.3	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	150	8.00	"	160		94.0	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	66.6	3.76	"	75.2		88.6	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	298	15.0	"	300		99.3	50-150				
HFPO-DA (Gen-X)	156	16.0	"	160		97.6	50-150				
11CL-PF3OUdS	113	15.1	"	151		74.9	50-150				
9CL-PF3ONS	122	15.0	"	150		81.7	50-150				
ADONA	131	15.1	"	151		86.7	50-150				
Perfluorododecanesulfonic acid (PFDoS)	57.1	3.88	"	77.6		73.6	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	68.0	3.84	"	76.8		88.6	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	291	10.0	"	320		91.0	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	1410	50.0	"	1600		88.4	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	1720	50.0	"	1600		108	50-150				
N-MeFOSE	775	40.0	"	800		96.9	50-150				
N-MeFOSA	74.7	4.00	"	80.0		93.4	50-150				
N-EtFOSE	779	40.0	"	800		97.3	50-150				
N-EtFOSA	58.3	4.00	"	80.0		72.8	50-150				
Surrogate: M3PFBS	67.5		"	46.6		145	25-150				
Surrogate: M5PFHxA	59.1		"	50.0		118	25-150				
Surrogate: M4PFHpA	72.6		"	50.0		145	25-150				
Surrogate: M3PFHxS	69.7		"	47.4		147	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	59.3		"	50.0		119	25-150				
Surrogate: M6PFDA	31.0		"	25.0		124	25-150				
Surrogate: M7PFUdA	22.9		"	25.0		91.7	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	20.6		"	25.0		82.3	25-150				
Surrogate: M2PFTeDA	13.0		"	25.0		52.0	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG41176 - EPA 1633 Prep

LCS (BG41176-BS1)

Prepared & Analyzed: 07/18/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	37.5		ng/L	200		18.8	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	60.7		"	47.9		127	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	125		"	100		125	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	31.2		"	50.0		62.5	10-150				
Surrogate: d3-N-MeFOSAA	116		"	100		116	25-150				
Surrogate: d5-N-EtFOSAA	88.6		"	100		88.6	25-150				
Surrogate: M2-6:2 FTS	132		"	95.1		139	25-200				
Surrogate: M2-8:2 FTS	129		"	96.0		134	25-200				
Surrogate: M9PFNA	35.8		"	25.0		143	25-150				
Surrogate: M2-4:2 FTS	65.1		"	93.8		69.4	25-150				
Surrogate: d-N-MeFOSA	22.2		"	50.0		44.4	25-150				
Surrogate: d-N-EtFOSA	20.5		"	50.0		41.0	25-150				
Surrogate: M3HFPO-DA	264		"	200		132	25-150				
Surrogate: d9-N-EtFOSE	171		"	500		34.2	25-150				
Surrogate: d7-N-MeFOSE	249		"	500		49.9	25-150				



Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BG40920 - EPA SW846-3510C Low Level

Blank (BG40920-BLK1)

Prepared & Analyzed: 07/15/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	0.175	mg/L								
Surrogate: 1-Chlorooctadecane	0.0429		"	0.100		42.9	30-140				

LCS (BG40920-BS1)

Prepared & Analyzed: 07/15/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.630	0.150	mg/L	0.750		84.0	60-120				
Surrogate: 1-Chlorooctadecane	0.0576		"	0.100		57.6	30-140				

LCS Dup (BG40920-BSD1)

Prepared & Analyzed: 07/15/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.697	0.150	mg/L	0.750		93.0	60-120		10.2	30	
Surrogate: 1-Chlorooctadecane	0.0613		"	0.100		61.3	30-140				

Batch BG41036 - EPA SW846-3510C Low Level

Blank (BG41036-BLK1)

Prepared: 07/16/2024 Analyzed: 07/17/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	0.150	mg/L								
Surrogate: 1-Chlorooctadecane	0.0404		"	0.100		40.4	30-140				

LCS (BG41036-BS1)

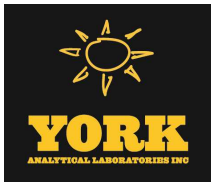
Prepared: 07/16/2024 Analyzed: 07/17/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.643	0.150	mg/L	0.750		85.8	60-120				
Surrogate: 1-Chlorooctadecane	0.0378		"	0.100		37.8	30-140				

LCS Dup (BG41036-BSD1)

Prepared: 07/16/2024 Analyzed: 07/17/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.672	0.150	mg/L	0.750		89.6	60-120		4.37	30	
Surrogate: 1-Chlorooctadecane	0.0401		"	0.100		40.1	30-140				



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BG40931 - EPA SW846-7470A											
Blank (BG40931-BLK1)								Prepared & Analyzed: 07/15/2024			
Mercury	ND	0.0002	mg/L								
Blank (BG40931-BLK2)								Prepared & Analyzed: 07/15/2024			
Mercury	ND	0.0002	mg/L								
LCS (BG40931-BS1)								Prepared & Analyzed: 07/15/2024			
Mercury	0.0020390	0.0002	mg/L	0.00200		102	80-120				
LCS (BG40931-BS2)								Prepared & Analyzed: 07/15/2024			
Mercury	0.0021100	0.0002	mg/L	0.00200		105	80-120				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
24G0588-01	VHB-MW-01-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24G0588-03	MW-1R-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24G0588-04	MW-3-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24G0588-05	MW-6-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24G0588-06	Dup-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24G0588-07	Trip Blank-20240709	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
PFSu-L	The isotopically labeled surrogate recovered below lab control limits due to a matrix effect. Isotope Dilution was applied.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
PF-CCV-L	The CCV recovery for this PFAS compound was below control limits.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
CAL-E	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%)
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.



Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This legal document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 66 Church Hill Rd #2 Newtown, CT 06470 2161 Whitesville Rd Toms River, NJ 08755 clientservices@yorklab.com 800-306-YORK

Page 1 of 1

YORK Project Number 2460588

Turn-Around Time

RUSH - Next Day

RUSH - Two Day

RUSH - Three Day

RUSH - Four Day

RUSH - Five Day

Standard (6-9 Day)

PFAS Standard 7-10 Day

Report Type (circle)

QA Report

Summary (Results Only)

NY ASP B Package

NJ Reduced

NJ DKQP

NJ Full

CT RCP

Grab or Comp.

EDD Type (circle)

EquiS (standard)

NYSDEC EQUIS

NJDEP SRP Haz Site

Standard Excel

CMDP

Other: EFWEDD

Regulatory Comparative

Compared to the following Regulation(s): (please fill in)

GWPC

SWPC

Field Filtered

Lab Filtered

Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N

Custody Seals: X / P Containers Intact Y / N COC/Labels Agree Y / N Preservation Confirmed Y / N

COC Complete Y / N COC Received Y / N Appropriate Sample Volumes Y / N Appropriate Sample Containers Y / N

Cooler Temperature Confirmed Y / N Samples Submitted within Holding Times Y / N Corrective Action Form Required: Y / N

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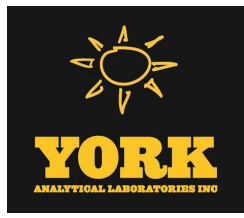
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Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 12/04/2024

Client Project ID: Hempstead Park/43340

York Project (SDG) No.: 24K1488

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE
www.YORKLAB.com

STRATFORD, CT 06615
(203) 325-1371



132-02 89th AVENUE
FAX (203) 357-0166

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 12/04/2024
Client Project ID: Hempstead Park/43340
York Project (SDG) No.: 24K1488

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on November 20, 2024 and listed below. The project was identified as your project: **Hempstead Park/43340**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24K1488-01	VHB-MW-01	Ground Water	11/19/2024	11/20/2024
24K1488-02	VHB-MW-02	Ground Water	11/19/2024	11/20/2024
24K1488-03	MW-1R	Ground Water	11/19/2024	11/20/2024
24K1488-04	MW-3	Ground Water	11/19/2024	11/20/2024
24K1488-05	MW-6	Ground Water	11/19/2024	11/20/2024
24K1488-06	DUP	Ground Water	11/19/2024	11/20/2024
24K1488-07	Trip Blank	Ground Water	11/19/2024	11/20/2024

General Notes for York Project (SDG) No.: 24K1488

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Cassie L Mosher
Laboratory Manager

Date: 12/04/2024





Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 2:00 pm

Date Received

11/20/2024

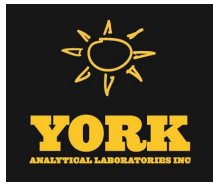
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
95-63-6	1,2,4-Trimethylbenzene	27.3		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
67-64-1	Acetone	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
74-83-9	Bromomethane	ND	CCVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD



Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 2:00 pm

Date Received

11/20/2024

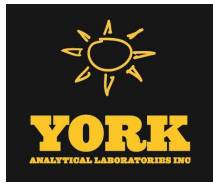
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
74-87-3	Chloromethane	ND	QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-71-8	Dichlorodifluoromethane	ND	QL-02, CCVE, ICVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
98-82-8	Isopropylbenzene	3.23		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
103-65-1	n-Propylbenzene	1.50		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
135-98-8	sec-Butylbenzene	2.08		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
98-06-6	tert-Butylbenzene	2.60		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
127-18-4	Tetrachloroethylene	ND	QL-02, ICVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
75-01-4	Vinyl Chloride	ND	QL-02, CCVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:26	PD
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.2 %	70-130							



Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 2:00 pm

Date Received

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
2037-26-5	Surrogate: SURR: Toluene-d8	96.9 %			70-130					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	110 %			70-130					

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	11/25/2024 08:58	11/26/2024 11:44	SS
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	82.1 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	67.5 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	46.3 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
208-96-8	Acenaphthylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
120-12-7	Anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
218-01-9	Chrysene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
53-70-3	Dibenzo(a,h)anthracene	ND	CCVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
206-44-0	Fluoranthene	0.0500		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
86-73-7	Fluorene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
91-20-3	Naphthalene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
85-01-8	Phenanthrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS
129-00-0	Pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 13:56	SS



Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 2:00 pm

11/20/2024

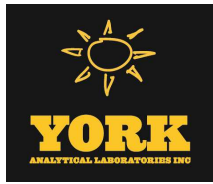
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	51.1		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	18.1		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.14		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	242		ng/L	1.95	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	16.7		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	59.6		ng/L	1.98	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	11.2		ng/L	4.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	3.63		ng/L	2.04	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	2.06	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	13.5		ng/L	8.11	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	8.19	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	12.0		ng/L	8.54	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.80	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	4.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	4.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	4.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	70.6		ng/L	2.01	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	8.00	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	8.54	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	8.07	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.98	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
919005-14-4	ADONA	ND		ng/L	8.07	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ



Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 2:00 pm

Date Received

11/20/2024

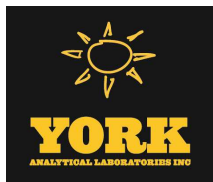
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	2.07	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	2.05	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	5.34	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	26.7	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	26.7	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	21.3	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	21.3	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	2.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:27	ESJ
Surrogate Recoveries		Result	Acceptance Range							
M3PFBS	Surrogate: M3PFBS	127 %			25-150					
13C5PFHXA	Surrogate: M5PFHxA	154 %	PFSu-H		25-150					
13C4PFHPA	Surrogate: M4PFHpA	153 %	PFSu-H		25-150					
13C3PFHXS	Surrogate: M3PFHxS	137 %			25-150					
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	124 %			25-150					
13C6PFDA	Surrogate: M6PFDA	131 %			25-150					
13C7PFUNA	Surrogate: M7PFUdA	125 %			25-150					
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	98.9 %			25-150					
13C2PFTEDA	Surrogate: M2PFTeDA	123 %			10-150					
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	98.5 %			25-150					
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfoni	120 %			25-150					
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic aci	160 %	PFSu-H		25-150					
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfonc	116 %			10-150					
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	119 %			25-150					
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	118 %			25-150					
M2-6:2FTS	Surrogate: M2-6:2 FTS	219 %	PFSu-H		25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	158 %			25-200					
13C9PFNA	Surrogate: M9PFNA	115 %			25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	179 %	PFSu-H		25-150					
936109-37-4	Surrogate: d-N-MeFOSA	126 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	96.4 %			25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	173 %	PFSu-H		25-150					
D9-NETPFOSA	Surrogate: d9-N-EtFOSE	85.3 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	90.7 %			25-150					



Sample Information

Client Sample ID: VHB-MW-01

York Sample ID: 24K1488-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 2:00 pm

11/20/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.618		mg/L	0.231	1	CT DEP ETPH	11/24/2024 07:47	11/24/2024 17:05	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	54.0 %			30-140					

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-38-2	Arsenic	0.00847		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-39-3	Barium	0.477	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-43-9	Cadmium	ND	M-CCV1	mg/L	0.000556	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-47-3	Chromium	0.00143		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-50-8	Copper	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7439-92-1	Lead	0.00602		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-02-0	Nickel	0.0391		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7782-49-2	Selenium	0.00137	B	mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw
7440-66-6	Zinc	0.322		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:07	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	11/25/2024 09:15	11/25/2024 09:15	PFA

Sample Information

Client Sample ID: VHB-MW-02

York Sample ID: 24K1488-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 1:50 pm

11/20/2024



Sample Information

Client Sample ID: VHB-MW-02

York Sample ID: 24K1488-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 1:50 pm

11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	86.3		ng/L	8.36	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
307-24-4	Perfluorohexanoic acid (PFHxA)	76.0		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
375-85-9	Perfluoroheptanoic acid (PFHpA)	22.4		PF-CCV- ng/L H	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1280		ng/L	8.65	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
335-67-1	Perfluorooctanoic acid (PFOA)	43.4		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2820		ng/L	8.79	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
375-95-1	Perfluorononanoic acid (PFNA)	6.84	J	ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
2355-31-9	N-MeFOSAA	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
2991-50-6	N-EtFOSAA	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
2706-90-3	Perfluoropentanoic acid (PFPeA)	30.6		ng/L	18.9	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	71.5		ng/L	9.03	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	9.12	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	35.9	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	36.3	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
375-22-4	Perfluoro-n-butanoic acid (PFBA)	15.7	J	ng/L	37.8	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	16.8	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		PF-CCV- ng/L L	18.9	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND		ng/L	18.9	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	18.9	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	203		ng/L	8.88	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	35.4	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	37.8	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
763051-92-9	11CL-PF3OUdS	ND		ng/L	35.7	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
756426-58-1	9CL-PF3ONS	ND		ng/L	35.3	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
919005-14-4	ADONA	ND		ng/L	35.7	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM



Sample Information

Client Sample ID: VHB-MW-02

York Sample ID: 24K1488-02

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 1:50 pm

Date Received
11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	9.17	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	6.19	J	ng/L	9.07	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	23.6	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	118	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	118	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
24448-09-7	N-MeFOSE	ND		ng/L	94.5	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
31506-32-8	N-MeFOSA	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
1691-99-2	N-EtFOSE	ND		ng/L	94.5	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
4151-50-2	N-EtFOSA	ND		ng/L	9.45	5	EPA 1633 Draft 3	11/25/2024 11:38	11/27/2024 10:43	AM
Surrogate Recoveries		Result	Acceptance Range							
M3PFBS	Surrogate: M3PFBS	142 %			25-150					
13C5PFHXA	Surrogate: M5PFHxA	138 %			25-150					
13C4PFHPA	Surrogate: M4PFHpA	133 %			25-150					
13C3PFHXS	Surrogate: M3PFHxS	137 %			25-150					
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	136 %			25-150					
13C6PFDA	Surrogate: M6PFDA	127 %			25-150					
13C7PFUNA	Surrogate: M7PFUdA	83.4 %			25-150					
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	80.0 %			25-150					
13C2PFTEDA	Surrogate: M2PFTeDA	73.1 %			10-150					
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	118 %			25-150					
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfoni	125 %			25-150					
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic aci	134 %			25-150					
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfon	111 %			10-150					
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	103 %			25-150					
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	109 %			25-150					
M2-6:2FTS	Surrogate: M2-6:2 FTS	302 %		PFSu-H	25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	198 %			25-200					
13C9PFNA	Surrogate: M9PFNA	123 %			25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	245 %		PFSu-H	25-150					
936109-37-4	Surrogate: d-N-MeFOSA	75.1 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	100 %			25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	157 %		PFSu-H	25-150					
D9-NETPFOSA	Surrogate: d9-N-EtFOSE	50.1 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	63.4 %			25-150					



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 11:45 am

Date Received
11/20/2024

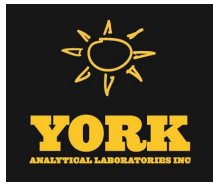
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
67-64-1	Acetone	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
74-83-9	Bromomethane	ND	CCVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 11:45 am

Date Received

11/20/2024

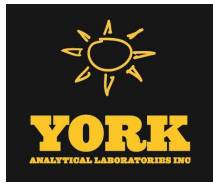
VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
67-66-3	Chloroform	0.700		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
74-87-3	Chloromethane	ND	QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-71-8	Dichlorodifluoromethane	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
75-01-4	Vinyl Chloride	ND	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 04:52	PD
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	92.7 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	97.0 %	70-130							



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 11:45 am

Date Received

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %			70-130					

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	11/25/2024 08:58	11/26/2024 12:44	SS
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	84.3 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	67.5 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	60.3 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
208-96-8	Acenaphthylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
120-12-7	Anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
218-01-9	Chrysene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
53-70-3	Dibenzo(a,h)anthracene	ND	CCVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
206-44-0	Fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
86-73-7	Fluorene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
91-20-3	Naphthalene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
85-01-8	Phenanthrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS
129-00-0	Pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:26	SS

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	13.8		ng/L	1.66	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	9.00		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.66		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

RICHMOND HILL, NY 11418

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(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 11:45 am

Date Received
11/20/2024

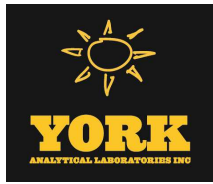
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	29.3		ng/L	1.72	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	12.8		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	21.1		ng/L	1.75	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	1.50	J	ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	10.3		ng/L	3.76	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.79	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.81	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	ND		ng/L	7.14	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.21	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	5.96	J	ng/L	7.51	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND		ng/L	3.34	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.76	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	3.76	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.76	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	5.79		ng/L	1.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.04	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.51	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.10	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.02	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
919005-14-4	ADONA	ND		ng/L	7.10	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.80	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 11:45 am

Date Received

11/20/2024

PFAS, EPA 1633 Target List

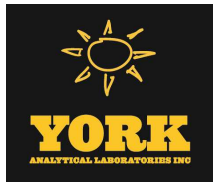
Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.70	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.5	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.5	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	18.8	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	18.8	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.88	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:43	ESJ

Surrogate Recoveries		Result	Acceptance Range	
M3PFBS	Surrogate: M3PFBS	112 %	25-150	
13C5PFHXA	Surrogate: M5PFHxA	141 %	25-150	
13C4PFHPA	Surrogate: M4PFHpA	124 %	25-150	
13C3PFHXS	Surrogate: M3PFHxS	125 %	25-150	
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	129 %	25-150	
13C6PFDA	Surrogate: M6PFDA	116 %	25-150	
13C7PFUNA	Surrogate: M7PFUDa	135 %	25-150	
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	134 %	25-150	
13C2PFTEDA	Surrogate: M2PFTeDA	118 %	10-150	
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	138 %	25-150	
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfoni	125 %	25-150	
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic aci	141 %	25-150	
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfon	115 %	10-150	
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	127 %	25-150	
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	120 %	25-150	
M2-6:2FTS	Surrogate: M2-6:2 FTS	167 %	25-200	
M2-8:2FTS	Surrogate: M2-8:2 FTS	135 %	25-200	
13C9PFNA	Surrogate: M9PFNA	130 %	25-150	
M2-4:2FTS	Surrogate: M2-4:2 FTS	138 %	25-150	
936109-37-4	Surrogate: d-N-MeFOSA	106 %	25-150	
936109-40-9	Surrogate: d-N-EtFOSA	113 %	25-150	
M3HFPO-DA	Surrogate: M3HFPO-DA	156 %	PFSu-H	25-150
D9-NETPFOSAI	Surrogate: d9-N-EtFOSE	89.4 %	25-150	
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	101 %	25-150	



Sample Information

Client Sample ID: MW-1R

York Sample ID: 24K1488-03

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 11:45 am

Date Received

11/20/2024

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/L	0.158	1	CT DEP ETPH	11/24/2024 07:47	11/24/2024 17:44	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	49.3 %			30-140					

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-39-3	Barium	0.0455	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-43-9	Cadmium	ND	M-CCV1	mg/L	0.000556	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-47-3	Chromium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-50-8	Copper	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-02-0	Nickel	0.00166		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7782-49-2	Selenium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw
7440-66-6	Zinc	0.0334		mg/L	0.00111	1	EPA 6020B	11/22/2024 08:49	11/26/2024 13:10	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	11/25/2024 09:15	11/25/2024 09:15	PFA

Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 12:55 pm

Date Received

11/20/2024



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:55 pm

11/20/2024

VOA, 8260 RCPL LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
67-64-1	Acetone	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
74-83-9	Bromomethane	ND	CCVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:55 pm

11/20/2024

VOA, 8260 RCP LOW MASTER

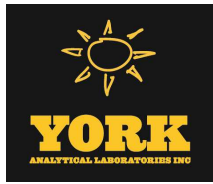
Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
74-87-3	Chloromethane	ND	QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-71-8	Dichlorodifluoromethane	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD
75-01-4	Vinyl Chloride	ND	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:19	PD

Surrogate Recoveries		Result	Acceptance Range
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	91.2 %	70-130
2037-26-5	Surrogate: SURR: Toluene-d8	97.0 %	70-130



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 12:55 pm

Date Received

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %			70-130					

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	11/25/2024 08:58	11/26/2024 13:43	SS
	Surrogate Recoveries	Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	78.2 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	64.4 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	36.8 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
208-96-8	Acenaphthylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
120-12-7	Anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
218-01-9	Chrysene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
53-70-3	Dibenzo(a,h)anthracene	ND	CCVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
206-44-0	Fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
86-73-7	Fluorene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
91-20-3	Naphthalene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
85-01-8	Phenanthrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS
129-00-0	Pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 14:56	SS

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	134		ng/L	1.64	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	108		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	28.2		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

RICHMOND HILL, NY 11418

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ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:55 pm

11/20/2024

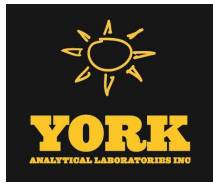
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1820		ng/L	17.0	10	EPA 1633 Draft 3	11/26/2024 17:52	12/02/2024 17:59	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	66.2		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	3370		ng/L	17.3	10	EPA 1633 Draft 3	11/26/2024 17:52	12/02/2024 17:59	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	7.79		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	48.3		ng/L	3.71	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	96.2		ng/L	1.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.79	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	21.2		ng/L	7.06	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	25.5		ng/L	7.43	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.31	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
151772-58-6	Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND		ng/L	3.71	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	3.71	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.71	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	349		ng/L	1.75	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	6.96	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.43	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.02	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	6.95	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
919005-14-4	ADONA	ND		ng/L	7.02	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.80	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.78	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 12:55 pm

Date Received

11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.64	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.2	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.2	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	18.6	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	18.6	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 17:59	ESJ
Surrogate Recoveries		Result	Acceptance Range							
M3PFBS	Surrogate: M3PFBS	167 %	PFSu-H	25-150						
M3PFBS	Surrogate: M3PFBS	122 %		25-150						
13C5PFHXA	Surrogate: M5PFHxA	143 %		25-150						
13C5PFHXA	Surrogate: M5PFHxA	114 %		25-150						
13C4PFHPA	Surrogate: M4PFHpA	126 %		25-150						
13C4PFHPA	Surrogate: M4PFHpA	108 %		25-150						
13C3PFHXS	Surrogate: M3PFHxS	118 %		25-150						
13C3PFHXS	Surrogate: M3PFHxS	103 %		25-150						
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	129 %		25-150						
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	117 %		25-150						
13C6PFDA	Surrogate: M6PFDA	111 %		25-150						
13C6PFDA	Surrogate: M6PFDA	91.4 %		25-150						
13C7PFUNA	Surrogate: M7PFUdA	103 %		25-150						
13C7PFUNA	Surrogate: M7PFUdA	83.6 %		25-150						
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	76.3 %		25-150						
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	77.2 %		25-150						
13C2PFTEDA	Surrogate: M2PFTeDA	69.2 %		10-150						
13C2PFTEDA	Surrogate: M2PFTeDA	74.0 %		10-150						
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	128 %		25-150						
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	138 %		25-150						
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	158 %	PFSu-H	25-150						
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	119 %		25-150						
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic acid	107 %		25-150						
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic acid	141 %		25-150						
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	160 %	PFSu-H	10-150						
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfonyl	88.3 %		10-150						
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	156 %	PFSu-H	25-150						
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	88.3 %		25-150						
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	145 %		25-150						



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 12:55 pm

Date Received
11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	81.3 %			25-150					
M2-6:2FTS	Surrogate: M2-6:2 FTS	292 %	PFSu-H		25-200					
M2-6:2FTS	Surrogate: M2-6:2 FTS	124 %			25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	227 %	PFSu-H		25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	129 %			25-200					
13C9PFNA	Surrogate: M9PFNA	111 %			25-150					
13C9PFNA	Surrogate: M9PFNA	117 %			25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	238 %	PFSu-H		25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	72.9 %			25-150					
936109-37-4	Surrogate: d-N-MeFOSA	114 %			25-150					
936109-37-4	Surrogate: d-N-MeFOSA	56.3 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	83.1 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	63.9 %			25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	151 %	PFSu-H		25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	128 %			25-150					
D9-NETPFOSAI	Surrogate: d9-N-EtFOSE	71.5 %			25-150					
D9-NETPFOSAI	Surrogate: d9-N-EtFOSE	45.4 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	88.8 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	63.3 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	ND		mg/L	0.162	1	CT DEP ETPH	11/24/2024 07:47	11/24/2024 18:22	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	58.3 %			30-140					

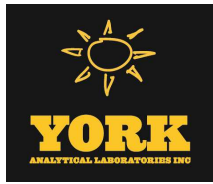
Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-39-3	Barium	0.0972	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-43-9	Cadmium	ND	M-CCV1	mg/L	0.000556	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-47-3	Chromium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw



Sample Information

Client Sample ID: MW-3

York Sample ID: 24K1488-04

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 12:55 pm

Date Received

11/20/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-50-8	Copper	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-02-0	Nickel	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7782-49-2	Selenium	0.00680		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw
7440-66-6	Zinc	0.0228	B	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 12:56	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	11/25/2024 09:15	11/25/2024 09:15	PFA

Sample Information

Client Sample ID: MW-6

York Sample ID: 24K1488-05

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 8:50 am

Date Received

11/20/2024

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	11/25/2024 08:58	11/26/2024 14:13	SS
Surrogate Recoveries		Result		Acceptance Range						
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	72.7 %		30-130						
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	60.8 %		30-130						
1718-51-0	Surrogate: SURR: Terphenyl-d14	74.7 %		30-130						

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	0.170	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
208-96-8	Acenaphthylene	0.150	ICVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
120-12-7	Anthracene	0.0500		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS

120 RESEARCH DRIVE

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132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: MW-6

York Sample ID: 24K1488-05

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 8:50 am

Date Received
11/20/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
218-01-9	Chrysene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
53-70-3	Dibenzo(a,h)anthracene	ND	CCVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
206-44-0	Fluoranthene	0.0600	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
86-73-7	Fluorene	0.190	ICVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
91-20-3	Naphthalene	0.870	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
85-01-8	Phenanthrene	0.220	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS
129-00-0	Pyrene	0.0500		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:25	SS

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	30.2		ng/L	1.67	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	22.5		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	6.47		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.37		ng/L	1.73	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	17.9		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	53.3		ng/L	1.75	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	1.44	J	ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	17.1		ng/L	3.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.80	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.82	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	27.2		ng/L	7.17	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ



Sample Information

Client Sample ID: MW-6

York Sample ID: 24K1488-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 8:50 am

11/20/2024

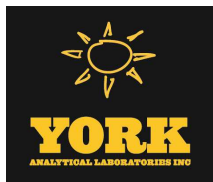
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.25	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	16.2		ng/L	7.55	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND		ng/L	3.36	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ng/L	3.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS- L	ng/L	3.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	0.724	J	ng/L	1.77	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.08	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.55	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.06	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
919005-14-4	ADONA	ND		ng/L	7.13	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.83	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.81	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPtPA)	ND		ng/L	4.72	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	23.6	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	23.6	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	18.9	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	18.9	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.89	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:15	ESJ
Surrogate Recoveries		Result	Acceptance Range							
M3PFBS	Surrogate: M3PFBS	118 %	25-150							
13C5PFHXA	Surrogate: M5PFHxA	121 %	25-150							
13C4PFHPA	Surrogate: M4PFHpA	126 %	25-150							
13C3PFHXS	Surrogate: M3PFHxS	124 %	25-150							
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	116 %	25-150							
13C6PFDA	Surrogate: M6PFDA	115 %	25-150							
13C7PFUNA	Surrogate: M7PFUdA	123 %	25-150							
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	115 %	25-150							
13C2PFTEDA	Surrogate: M2PFTeDA	109 %	10-150							



Sample Information

Client Sample ID: MW-6

York Sample ID: 24K1488-05

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 8:50 am

Date Received

11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	64.7 %			25-150					
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfoni	127 %			25-150					
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic aci	123 %			25-150					
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfonc	117 %			10-150					
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	111 %			25-150					
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	109 %			25-150					
M2-6:2FTS	Surrogate: M2-6:2 FTS	211 %	PFSu-H		25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	145 %			25-200					
13C9PFNA	Surrogate: M9PFNA	119 %			25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	164 %	PFSu-H		25-150					
936109-37-4	Surrogate: d-N-MeFOSA	114 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	98.6 %			25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	135 %			25-150					
D9-NETPFOSA	Surrogate: d9-N-EtFOSE	86.9 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	96.2 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.183		mg/L	0.167	1	CT DEP ETPH	11/24/2024 07:47	11/24/2024 19:00	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	41.7 %			30-140					

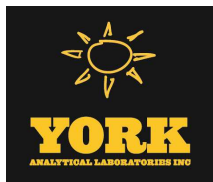
Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-39-3	Barium	0.0225	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-43-9	Cadmium	ND	M-CCV1	mg/L	0.000556	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-47-3	Chromium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-50-8	Copper	0.00219	B	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-02-0	Nickel	0.00236		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7782-49-2	Selenium	0.00189		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw



Sample Information

Client Sample ID: MW-6

York Sample ID: 24K1488-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 8:50 am

11/20/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw
7440-66-6	Zinc	0.0512	B	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:00	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	11/25/2024 09:15	11/25/2024 09:15	PFA

Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:01 am

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:01 am

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
67-64-1	Acetone	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
107-13-1	Acrylonitrile	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
71-43-2	Benzene	0.600		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
74-83-9	Bromomethane	ND	CCVE	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
74-87-3	Chloromethane	ND	QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-71-8	Dichlorodifluoromethane	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 12:01 am

Date Received
11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
135-98-8	sec-Butylbenzene	0.940		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
127-18-4	Tetrachloroethylene	ND	ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
75-01-4	Vinyl Chloride	ND	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	11/22/2024 08:00	11/23/2024 05:45	PD
Surrogate Recoveries		Result			Acceptance Range					
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	89.7 %			70-130					
2037-26-5	Surrogate: SURR: Toluene-d8	97.7 %			70-130					
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %			70-130					

SVOA, 8270 LOW RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/L	5.00	1	EPA 8270D	11/25/2024 08:58	11/26/2024 15:43	SS
Surrogate Recoveries		Result			Acceptance Range					
4165-60-0	Surrogate: SURR: Nitrobenzene-d5	85.4 %			30-130					
321-60-8	Surrogate: SURR: 2-Fluorobiphenyl	73.4 %			30-130					
1718-51-0	Surrogate: SURR: Terphenyl-d14	65.9 %			30-130					

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
83-32-9	Acenaphthene	0.210	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
208-96-8	Acenaphthylene	0.190	ICVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

RICHMOND HILL, NY 11418

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ClientServices@yorklab.com



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 12:01 am

Date Received
11/20/2024

SVOA, 8270 SIM RCP MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3510C

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-12-7	Anthracene	0.280	ICVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
56-55-3	Benzo(a)anthracene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
50-32-8	Benzo(a)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
205-99-2	Benzo(b)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
191-24-2	Benzo(g,h,i)perylene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
207-08-9	Benzo(k)fluoranthene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
218-01-9	Chrysene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
53-70-3	Dibenzo(a,h)anthracene	ND	CCVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
206-44-0	Fluoranthene	0.0700	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
86-73-7	Fluorene	0.240	ICVE	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
91-20-3	Naphthalene	1.15	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
85-01-8	Phenanthrene	0.260	ICVE20	ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS
129-00-0	Pyrene	0.0500		ug/L	0.0500	1	EPA 8270D SIM	11/25/2024 08:58	11/26/2024 15:55	SS

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
375-73-5	Perfluorobutanesulfonic acid (PFBS)	31.4		ng/L	1.70	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
307-24-4	Perfluorohexanoic acid (PFHxA)	21.4		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
375-85-9	Perfluoroheptanoic acid (PFHpA)	7.55		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	4.02		ng/L	1.76	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
335-67-1	Perfluorooctanoic acid (PFOA)	17.7		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	45.7		ng/L	1.79	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
375-95-1	Perfluorononanoic acid (PFNA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
335-76-2	Perfluorodecanoic acid (PFDA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
307-55-1	Perfluorododecanoic acid (PFDoA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
72629-94-8	Perfluorotridecanoic acid (PFTTrDA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
376-06-7	Perfluorotetradecanoic acid (PFTA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
2355-31-9	N-MeFOSAA	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
2991-50-6	N-EtFOSAA	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
2706-90-3	Perfluoropentanoic acid (PFPeA)	17.9		ng/L	3.85	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
754-91-6	Perfluoro-1-octanesulfonamide (FOSA)	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
375-92-8	Perfluoro-1-heptanesulfonic acid (PFHpS)	ND		ng/L	1.84	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
335-77-3	Perfluoro-1-decanesulfonic acid (PFDS)	ND		ng/L	1.86	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 12:01 am

Date Received
11/20/2024

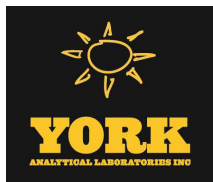
PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
27619-97-2	1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS)	29.4		ng/L	7.31	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
39108-34-4	1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	ND		ng/L	7.38	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
375-22-4	Perfluoro-n-butanoic acid (PFBA)	16.5		ng/L	7.69	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
113507-82-7	Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	ND		ng/L	3.42	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
151772-58-6	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		ng/L	3.85	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
377-73-1	Perfluoro-4-oxapentanoic acid (PFMPA)	ND	PF-LCS-L	ng/L	3.85	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
863090-89-5	Perfluoro-5-oxahexanoic acid (PFMBA)	ND		ng/L	3.85	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
2706-91-4	Perfluoro-1-pentanesulfonate (PFPeS)	ND		ng/L	1.81	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
757124-72-4	1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS)	ND		ng/L	7.21	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
13252-13-6	HFPO-DA (Gen-X)	ND		ng/L	7.69	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
763051-92-9	11CL-PF3OUdS	ND		ng/L	7.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
756426-58-1	9CL-PF3ONS	ND		ng/L	7.19	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
919005-14-4	ADONA	ND		ng/L	7.27	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ND		ng/L	1.87	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
68259-12-1	Perfluoro-1-nonanesulfonic acid (PFNS)	ND		ng/L	1.85	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
356-02-5	3-Perfluoropropyl propanoic acid (FPrPA)	ND		ng/L	4.81	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
914637-49-3	3-Perfluoropentyl propanoic acid (FPePA)	ND		ng/L	24.0	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
812-70-4	3-Perfluoroheptyl propanoic acid (FHpPA)	ND		ng/L	24.0	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
24448-09-7	N-MeFOSE	ND		ng/L	19.2	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
31506-32-8	N-MeFOSA	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
1691-99-2	N-EtFOSE	ND		ng/L	19.2	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
4151-50-2	N-EtFOSA	ND		ng/L	1.92	1	EPA 1633 Draft 3	11/26/2024 17:52	11/28/2024 18:31	ESJ
Surrogate Recoveries		Result	Acceptance Range							
M3PFBS	Surrogate: M3PFBS	127 %			25-150					
13C5PFHXA	Surrogate: M5PFHxA	164 %	PFSu-H		25-150					
13C4PFHPA	Surrogate: M4PFHpA	155 %	PFSu-H		25-150					
13C3PFHXS	Surrogate: M3PFHxS	144 %			25-150					
13C8PFOA	Surrogate: Perfluoro-n-[13C8]octanoic acid	127 %			25-150					
13C6PFDA	Surrogate: M6PFDA	129 %			25-150					
13C7PFUNA	Surrogate: M7PFUdA	135 %			25-150					
960315-52-0	Surrogate: Perfluoro-n-[1,2-13C2]dodecano	119 %			25-150					



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 12:01 am

11/20/2024

PFAS, EPA 1633 Target List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 1633 Prep

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
13C2PFTEDA	Surrogate: M2PFTeDA	98.1 %			10-150					
13C4PFBA	Surrogate: Perfluoro-n-[13C4]butanoic acid	79.1 %			25-150					
13C8PFOS	Surrogate: Perfluoro-1-[13C8]octanesulfonic	147 %			25-150					
13C5PFPEA	Surrogate: Perfluoro-n-[13C5]pentanoic acid	164 %	PFSu-H		25-150					
13C8FOSA	Surrogate: Perfluoro-1-[13C8]octanesulfonic	127 %			10-150					
D3-NMEFOSAA	Surrogate: d3-N-MeFOSAA	128 %			25-150					
D5-NETFOSAA	Surrogate: d5-N-EtFOSAA	123 %			25-150					
M2-6:2FTS	Surrogate: M2-6:2 FTS	258 %	PFSu-H		25-200					
M2-8:2FTS	Surrogate: M2-8:2 FTS	178 %			25-200					
13C9PFNA	Surrogate: M9PFNA	129 %			25-150					
M2-4:2FTS	Surrogate: M2-4:2 FTS	190 %	PFSu-H		25-150					
936109-37-4	Surrogate: d-N-MeFOSA	112 %			25-150					
936109-40-9	Surrogate: d-N-EtFOSA	121 %			25-150					
M3HFPO-DA	Surrogate: M3HFPO-DA	169 %	PFSu-H		25-150					
D9-NETPFOSAI	Surrogate: d9-N-EtFOSE	86.7 %			25-150					
D7-NMEPFOSA	Surrogate: d7-N-MeFOSE	94.2 %			25-150					

Extractable Total Petroleum Hydrocarbons (ETPH)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
CT ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)	0.341		mg/L	0.171	1	CT DEP ETPH	11/24/2024 07:47	11/24/2024 19:39	GXB
	Surrogate Recoveries	Result			Acceptance Range					
3386-33-2	Surrogate: 1-Chlorooctadecane	42.3 %			30-140					

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-38-2	Arsenic	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-39-3	Barium	0.0231	M-CCV1	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-41-7	Beryllium	ND		mg/L	0.000333	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-43-9	Cadmium	ND	M-CCV1	mg/L	0.000556	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-47-3	Chromium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-50-8	Copper	0.00192	B	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7439-92-1	Lead	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-02-0	Nickel	0.00229		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw

120 RESEARCH DRIVE

STRATFORD, CT 06615



132-02 89th AVENUE

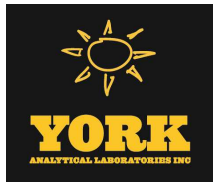
RICHMOND HILL, NY 11418

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(203) 325-1371

FAX (203) 357-0166

ClientServices@yorklab.com



Sample Information

Client Sample ID: DUP

York Sample ID: 24K1488-06

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 12:01 am

Date Received

11/20/2024

Metals, CTDEP RCP, ICP/MS (Full List)

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7782-49-2	Selenium	0.00235		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-22-4	Silver	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-28-0	Thallium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-62-2	Vanadium	ND		mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw
7440-66-6	Zinc	0.0317	B	mg/L	0.00111	1	EPA 6020B	11/25/2024 08:17	11/26/2024 13:03	cw

Mercury by 7470/7471

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA SW846-7470A

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.0002	1	EPA 7470	11/25/2024 09:15	11/25/2024 09:15	PFA

Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24K1488-07

York Project (SDG) No.

24K1488

Client Project ID

Hempstead Park/43340

Matrix

Ground Water

Collection Date/Time

November 19, 2024 2:00 pm

Date Received

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-34-3	1,1-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
563-58-6	1,1-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
106-93-4	1,2-Dibromoethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24K1488-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

24K1488

Hempstead Park/43340

Ground Water

November 19, 2024 2:00 pm

11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
107-06-2	1,2-Dichloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
78-87-5	1,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
142-28-9	1,3-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
594-20-7	2,2-Dichloropropane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
78-93-3	2-Butanone	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
95-49-8	2-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
591-78-6	2-Hexanone	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
106-43-4	4-Chlorotoluene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
67-64-1	Acetone	ND		ug/L	2.00	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
107-13-1	Acrylonitrile	0.790	CCVE, QL-02	ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
71-43-2	Benzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
108-86-1	Bromobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
74-97-5	Bromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-27-4	Bromodichloromethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-25-2	Bromoform	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
74-83-9	Bromomethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-15-0	Carbon disulfide	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
56-23-5	Carbon tetrachloride	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
108-90-7	Chlorobenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-00-3	Chloroethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
67-66-3	Chloroform	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
74-87-3	Chloromethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
124-48-1	Dibromochloromethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
74-95-3	Dibromomethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-71-8	Dichlorodifluoromethane	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
100-41-4	Ethyl Benzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
87-68-3	Hexachlorobutadiene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
98-82-8	Isopropylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
80-62-6	Methyl Methacrylate	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD



Sample Information

Client Sample ID: Trip Blank

York Sample ID: 24K1488-07

York Project (SDG) No.
24K1488

Client Project ID
Hempstead Park/43340

Matrix
Ground Water

Collection Date/Time
November 19, 2024 2:00 pm

Date Received
11/20/2024

VOA, 8260 RCP LOW MASTER

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/L	2.00	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
91-20-3	Naphthalene	ND		ug/L	2.00	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
104-51-8	n-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
103-65-1	n-Propylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
95-47-6	o-Xylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
179601-23-1	p- & m- Xylenes	ND		ug/L	1.00	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
99-87-6	p-Isopropyltoluene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
135-98-8	sec-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
100-42-5	Styrene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
98-06-6	tert-Butylbenzene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
127-18-4	Tetrachloroethylene	ND	CCVE, ICVE, QL-02	ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
109-99-9	Tetrahydrofuran	ND		ug/L	4.00	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
108-88-3	Toluene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
79-01-6	Trichloroethylene	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-69-4	Trichlorofluoromethane	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
75-01-4	Vinyl Chloride	ND		ug/L	0.500	1	EPA 8260C	11/23/2024 08:00	11/23/2024 16:08	PD
Surrogate Recoveries		Result	Acceptance Range							
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	100 %	70-130							
2037-26-5	Surrogate: SURR: Toluene-d8	94.1 %	70-130							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.4 %	70-130							



REASONABLE CONFIDENCE PROTOCOL LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

RCP Methods Used: See Narrative and Method Reference Section of this Technical Report

Yes / No / NA / NR

1) For each analytical method referenced in this laboratory, report package, were all sepcified QA/QC performance criteria followed (including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP RCPs)?	YES
1A) Were the method specified preservation, and holding time requirements met?	YES
1B) VPH and EPH Methods only: Was the method conducted without significant modifications (See section 11.3 of respective RCP methods)	NR
2) Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of custody document(s)?	YES
3) Were samples received at an appropriate temperature (< or = 6°C)?	YES
4) Were all QA/QC performance criteria specified in theCTDEP Reasonable Confidence Protocol documents achieved ?	NO
5 a) Were reporting limits specified or referenced on the chain-of-custody?	YES
5 b) Were these reporting limits met?	NO
6) For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	NO
7) Are project-specific matrix spikes and laboratory duplicates included in this data set?	NO

Notes: For all questions to which the response was No (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Reasonable Confidence". This form may not be altered and all question should be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: 

Position: Laboratory Manager

Printed name: Cassie L. Mosher

Date: 12/5/2024



York Narrative- CTDEEP RCP Introduction

This Work Order Narrative includes the following items for full review of any quality issues encountered with samples and their analyses for the parameters requested:

1. Sample Receipt Information, including a Sample Summary which cross references your sample ID with York Analytical sample ID, identifying the matrix and Date/Time collected and received at York.
2. Analysis Methodologies employed for the work order
3. Any Sample Issues encountered such as Holding time exceedances, improper containers/preservation, or any related issue with sample integrity
4. Specific Analysis Findings in order: Volatiles, Semi-Volatiles, Pesticides/PCBs, Herbicides, other GC parameters, Metals, Mercury, Wet Chemistry.
5. Analysis Findings Include:
 - BIAS Summary Report-Multiple Lines of Evidence
 - Analyte qualifier summary
 - Samples and associated Calibration Curve(s)
 - Calibration Outliers Discussion/Tabular presentation and affected samples
 - Initial Calibration Verification (ICV) information
 - Batch QC Sample Performance (Blanks, Blank Spikes (BS), MS/MSD)
 - Internal Standard Performance
 - Surrogate Performance
 - Example Calculations

York Analytical Work Order Narrative

Work Order Narrative

York Analytical Work Order No.: 24K1488

Client : VHB

Client Project ID : Hempstead Park/43340

Prepared for : Pamela Lind

1.0) Introduction

This work order Narrative applies to the following samples submitted to our laboratory on: 11/20/2024 2:15 PM

- 7 sample(s) were received intact in a custody-sealed cooler(s) unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ($\leq 6^{\circ}\text{C}$) and documented as: {2.7}°C

Sample Summary

<u>SampleName</u>	<u>Lab Number</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
VHB-MW-01	24K1488-01	Water	11/19/2024 2:00 PM	11/20/2024 2:15 PM
VHB-MW-02	24K1488-02	Water	11/19/2024 1:50 PM	11/20/2024 2:15 PM
MW-1R	24K1488-03	Water	11/19/2024 11:45 AM	11/20/2024 2:15 PM
MW-3	24K1488-04	Water	11/19/2024 12:55 PM	11/20/2024 2:15 PM
MW-6	24K1488-05	Water	11/19/2024 8:50 AM	11/20/2024 2:15 PM
DUP	24K1488-06	Water	11/19/2024 12:01 AM	11/20/2024 2:15 PM
Trip Blank	24K1488-07	Water	11/19/2024 2:00 PM	11/20/2024 2:15 PM

WorkOrder Comments

Limited volume provided for sample VHB-MW-01 for PAHs and ETPH. The lab with proceed with volume provided. The VOA Vials were received frozen and cracked for sample MW-6 and VOC analysis cannot be completed. The client was notified on 11/21/24.

The following CT RCP list of compound Reporting Limits do not meet the current action levels defined in the State of Connecticut Remedial Standard Regulations (RSR) as amended June 27, 2013 for groundwater protection criteria (GWPC) due to method limitations: Ethylene Dibromide (EDB). If EDB is required to meet GWPC, the LEP must request EPA SW 846 method 8011.

York Analytical Work Order Narrative

2.0 Methodology

<u>Analysis Class</u>	<u>Preparation Method</u>	<u>Analysis Methodology</u>
VOA	EPA 5030B	EPA 8260C
SVOA	EPA 3510C	EPA 8270D
SVOA	EPA 3510C	EPA 8270D SIM
PFAS	EPA 1633 Prep	EPA 1633 Draft 3
GC	EPA 3545A	CT DEP ETPH
GC	EPA SW846-3510C Low Level	CT DEP ETPH
METALS	EPA 3015A	EPA 6020B
HG	EPA SW846-7470A	EPA 7470

Analyte List

Method	Analyte
CT DEP ETPH	ETPH (Extractable Total Petroleum Hydrocarbons)
EPA 1633 Draft 3	11CL-PF3OUdS ; 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) ; 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) ; 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) ; 3-Perfluoroheptyl propanoic acid (FHpPA) ; 3-Perfluoropentyl propanoic acid (FPePA) ; 3-Perfluoropropyl propanoic acid (FPrPA) ; 9CL-PF3ONS ; ADONA ; HFPO-DA (Gen-X) ; N-EtFOSA ; N-EtFOSAA ; N-EtFOSE ; N-MeFOSA ; N-MeFOSAA ; N-MeFOSE ; Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) ; Perfluoro-1-decanesulfonic acid (PFDS) ; Perfluoro-1-heptanesulfonic acid (PFHpS) ; Perfluoro-1-nonanesulfonic acid (PFNS) ; Perfluoro-1-octanesulfonamide (FOSA) ; Perfluoro-1-pentanesulfonate (PFPeS) ; Perfluoro-3,6-dioxaheptanoic acid (NFDHA) ; Perfluoro-4-oxapentanoic acid (PFMPA) ; Perfluoro-5-oxahexanoic acid (PFMBA) ; Perfluorobutanesulfonic acid (PFBS) ; Perfluorodecanoic acid (PFDA) ; Perfluorododecanesulfonic acid (PFDoS) ; Perfluorododecanoic acid (PFDoA) ; Perfluoroheptanoic acid (PFHpA) ; Perfluorohexanesulfonic acid (PFHxS) ; Perfluorohexanoic acid (PFHxA) ; Perfluoro-n-butanoic acid (PFBA) ; Perfluorononanoic acid (PFNA) ; Perfluorooctanesulfonic acid (PFOS) ; Perfluorooctanoic acid (PFOA) ; Perfluoropentanoic acid (PFPeA) ; Perfluorotetradecanoic acid (PFTA) ; Perfluorotridecanoic acid (PFTrDA) ; Perfluoroundecanoic acid (PFUnA)
EPA 6020B	Antimony ; Arsenic ; Barium ; Beryllium ; Cadmium ; Chromium ; Copper ; Lead ; Nickel ; Selenium ; Silver ; Thallium ; Vanadium ; Zinc
EPA 7470	Mercury
EPA 8260C	1,1,1,2-Tetrachloroethane ; 1,1,1-Trichloroethane ; 1,1,2,2-Tetrachloroethane ; 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) ; 1,1,2-Trichloroethane ; 1,1-Dichloroethane ; 1,1-Dichloroethylene ; 1,1-Dichloropropylene ; 1,2,3-Trichlorobenzene ; 1,2,3-Trichloropropane ; 1,2,4-Trichlorobenzene ; 1,2,4-Trimethylbenzene ; 1,2-Dibromo-3-chloropropane ; 1,2-Dibromoethane ; 1,2-Dichlorobenzene ; 1,2-Dichloroethane ; 1,2-Dichloropropane ; 1,3,5-Trimethylbenzene ; 1,3-Dichlorobenzene ; 1,3-Dichloropropane ; 1,4-Dichlorobenzene ; 2,2-Dichloropropane ; 2-Butanone ; 2-Chlorotoluene ; 2-Hexanone ; 4-Chlorotoluene ; 4-Methyl-2-pentanone ; Acetone ; Acrylonitrile ; Benzene ; Bromobenzene ; Bromochloromethane ; Bromodichloromethane ; Bromoform ; Bromomethane ; Carbon disulfide ; Carbon tetrachloride ; Chlorobenzene ; Chloroethane ; Chloroform ; Chloromethane ; cis-1,2-Dichloroethylene ; cis-1,3-Dichloropropylene ; Dibromochloromethane ; Dibromomethane ; Dichlorodifluoromethane ; Ethyl Benzene ; Hexachlorobutadiene ; Isopropylbenzene ; Methyl Methacrylate ; Methyl tert-butyl ether (MTBE) ; Methylene chloride ; Naphthalene ; n-Butylbenzene ; n-Propylbenzene ; o-Xylene ; p- & m-Xylenes ; p-Isopropyltoluene ; sec-Butylbenzene ; Styrene ; tert-Butylbenzene ; Tetrachloroethylene ; Tetrahydrofuran ; Toluene ; trans-1,2-Dichloroethylene ; trans-1,3-Dichloropropylene ; trans-1,4-dichloro-2-butene ; Trichloroethylene ; Trichlorofluoromethane ; Vinyl Chloride
EPA 8270D	2-Methylnaphthalene
EPA 8270D SIM	Acenaphthene ; Acenaphthylene ; Anthracene ; Benzo(a)anthracene ; Benzo(a)pyrene ; Benzo(b)fluoranthene ; Benzo(g,h,i)perylene ; Benzo(k)fluoranthene ; Chrysene ; Dibenzo(a,h)anthracene ; Fluoranthene ; Fluorene ; Indeno(1,2,3-cd)pyrene ; Naphthalene ; Phenanthrene ; Pyrene

3.0 Sample Issues

No issues were encountered with the samples submitted other than those detailed below.

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
METALS	24K1488-01	VHB-MW-01	Antimony		Low				
METALS	24K1488-01	VHB-MW-01	Barium		Low				
METALS	24K1488-01	VHB-MW-01	Cadmium		Low				
METALS	24K1488-01	VHB-MW-01	Silver		Low				
METALS	24K1488-03	MW-1R	Antimony		Low				
METALS	24K1488-03	MW-1R	Barium		Low				
METALS	24K1488-03	MW-1R	Cadmium		Low				
METALS	24K1488-03	MW-1R	Silver		Low				
METALS	24K1488-04	MW-3	Antimony		Low				
METALS	24K1488-04	MW-3	Barium		Low				
METALS	24K1488-04	MW-3	Beryllium		high				
METALS	24K1488-04	MW-3	Cadmium		Low				
METALS	24K1488-04	MW-3	Silver		Low				
METALS	24K1488-05	MW-6	Antimony		high				
METALS	24K1488-05	MW-6	Barium		Low				
METALS	24K1488-05	MW-6	Beryllium		high				
METALS	24K1488-05	MW-6	Cadmium		high				
METALS	24K1488-05	MW-6	Silver		Low				
METALS	24K1488-06	DUP	Antimony		Low				
METALS	24K1488-06	DUP	Barium		Low				
METALS	24K1488-06	DUP	Beryllium		high				
METALS	24K1488-06	DUP	Cadmium		high				
METALS	24K1488-06	DUP	Silver		Low				

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
PFAS	24K1488-01	VHB-MW-01	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24K1488-02	VHB-MW-02	11CL-PF3OUdS		high				
PFAS	24K1488-02	VHB-MW-02	Perfluoro-1-nonanesulfonic acid (PFNS)		high				
PFAS	24K1488-02	VHB-MW-02	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)		Low				
PFAS	24K1488-02	VHB-MW-02	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24K1488-02	VHB-MW-02	Perfluorododecanesulfonic acid (PFDoS)		high				
PFAS	24K1488-02	VHB-MW-02	Perfluoroheptanoic acid (PFHpA)		high				
PFAS	24K1488-02	VHB-MW-02	Perfluorotridecanoic acid (PFTrDA)		Low				
PFAS	24K1488-03	MW-1R	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24K1488-04	MW-3	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24K1488-05	MW-6	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			
PFAS	24K1488-06	DUP	Perfluoro-4-oxapentanoic acid (PFMPA)			Low			

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
SVOA	24K1488-01	VHB-MW-01	Acenaphthene	high					
SVOA	24K1488-01	VHB-MW-01	Acenaphthylene	high					
SVOA	24K1488-01	VHB-MW-01	Anthracene	high					
SVOA	24K1488-01	VHB-MW-01	Benzo(a)anthracene	high					
SVOA	24K1488-01	VHB-MW-01	Benzo(a)pyrene	high					
SVOA	24K1488-01	VHB-MW-01	Benzo(g,h,i)perylene	high					
SVOA	24K1488-01	VHB-MW-01	Benzo(k)fluoranthene	high					
SVOA	24K1488-01	VHB-MW-01	Chrysene	high					
SVOA	24K1488-01	VHB-MW-01	Dibenzo(a,h)anthracene	high	Low				
SVOA	24K1488-01	VHB-MW-01	Fluorene	high					
SVOA	24K1488-01	VHB-MW-01	Indeno(1,2,3-cd)pyrene	high					
SVOA	24K1488-01	VHB-MW-01	Naphthalene	high					
SVOA	24K1488-01	VHB-MW-01	Phenanthrene	high					
SVOA	24K1488-01	VHB-MW-01	Pyrene	high					
SVOA	24K1488-03	MW-1R	Acenaphthene	high					
SVOA	24K1488-03	MW-1R	Acenaphthylene	high					
SVOA	24K1488-03	MW-1R	Anthracene	high					
SVOA	24K1488-03	MW-1R	Benzo(a)anthracene	high					
SVOA	24K1488-03	MW-1R	Benzo(a)pyrene	high					
SVOA	24K1488-03	MW-1R	Benzo(g,h,i)perylene	high					
SVOA	24K1488-03	MW-1R	Benzo(k)fluoranthene	high					
SVOA	24K1488-03	MW-1R	Chrysene	high					
SVOA	24K1488-03	MW-1R	Dibenzo(a,h)anthracene	high	Low				
SVOA	24K1488-03	MW-1R	Fluoranthene	high					
SVOA	24K1488-03	MW-1R	Fluorene	high					
SVOA	24K1488-03	MW-1R	Indeno(1,2,3-cd)pyrene	high					
SVOA	24K1488-03	MW-1R	Naphthalene	high					
SVOA	24K1488-03	MW-1R	Phenanthrene	high					
SVOA	24K1488-03	MW-1R	Pyrene	high					
SVOA	24K1488-04	MW-3	Acenaphthene	high					
SVOA	24K1488-04	MW-3	Acenaphthylene	high					
SVOA	24K1488-04	MW-3	Anthracene	high					
SVOA	24K1488-04	MW-3	Benzo(a)anthracene	high					
SVOA	24K1488-04	MW-3	Benzo(a)pyrene	high					
SVOA	24K1488-04	MW-3	Benzo(g,h,i)perylene	high					
SVOA	24K1488-04	MW-3	Benzo(k)fluoranthene	high					
SVOA	24K1488-04	MW-3	Chrysene	high					
SVOA	24K1488-04	MW-3	Dibenzo(a,h)anthracene	high	Low				
SVOA	24K1488-04	MW-3	Fluoranthene	high					
SVOA	24K1488-04	MW-3	Fluorene	high					
SVOA	24K1488-04	MW-3	Indeno(1,2,3-cd)pyrene	high					

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
SVOA	24K1488-04	MW-3	Naphthalene	high					
SVOA	24K1488-04	MW-3	Phenanthrene	high					
SVOA	24K1488-04	MW-3	Pyrene	high					
SVOA	24K1488-05	MW-6	Acenaphthene	high					
SVOA	24K1488-05	MW-6	Acenaphthylene	high					
SVOA	24K1488-05	MW-6	Benzo(a)anthracene	high					
SVOA	24K1488-05	MW-6	Benzo(a)pyrene	high					
SVOA	24K1488-05	MW-6	Benzo(g,h,i)perylene	high					
SVOA	24K1488-05	MW-6	Benzo(k)fluoranthene	high					
SVOA	24K1488-05	MW-6	Chrysene	high					
SVOA	24K1488-05	MW-6	Dibenzo(a,h)anthracene	high	Low				
SVOA	24K1488-05	MW-6	Fluoranthene	high					
SVOA	24K1488-05	MW-6	Fluorene	high					
SVOA	24K1488-05	MW-6	Indeno(1,2,3-cd)pyrene	high					
SVOA	24K1488-05	MW-6	Naphthalene	high					
SVOA	24K1488-05	MW-6	Phenanthrene	high					
SVOA	24K1488-06	DUP	Acenaphthene	high					
SVOA	24K1488-06	DUP	Acenaphthylene	high					
SVOA	24K1488-06	DUP	Anthracene	high					
SVOA	24K1488-06	DUP	Benzo(a)anthracene	high					
SVOA	24K1488-06	DUP	Benzo(a)pyrene	high					
SVOA	24K1488-06	DUP	Benzo(g,h,i)perylene	high					
SVOA	24K1488-06	DUP	Benzo(k)fluoranthene	high					
SVOA	24K1488-06	DUP	Chrysene	high					
SVOA	24K1488-06	DUP	Dibenzo(a,h)anthracene	high	Low				
SVOA	24K1488-06	DUP	Fluoranthene	high					
SVOA	24K1488-06	DUP	Fluorene	high					
SVOA	24K1488-06	DUP	Indeno(1,2,3-cd)pyrene	high					
SVOA	24K1488-06	DUP	Naphthalene	high					
SVOA	24K1488-06	DUP	Phenanthrene	high					

Sample Analyte Bias Based on QC Performance

	LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24K1488-01	VHB-MW-01	Bromoform	high					
VOA	24K1488-01	VHB-MW-01	Bromomethane	high	Low				
VOA	24K1488-01	VHB-MW-01	Chloromethane			Low			
VOA	24K1488-01	VHB-MW-01	Dichlorodifluoromethane	Low	Low	Low			
VOA	24K1488-01	VHB-MW-01	Tetrachloroethylene	Low		Low			
VOA	24K1488-01	VHB-MW-01	Vinyl Chloride		Low	Low			
VOA	24K1488-03	MW-1R	Bromoform	high					

York Analytical Work Order Narrative

Sample Analyte Bias Based on QC Performance

LabNumber	SampleID	Analyte	ICVSCV	CCV	BS/LCS	MS	MSD	MSDRPD
VOA	24K1488-03	MW-1R	Bromomethane	high	Low			
VOA	24K1488-03	MW-1R	Chloromethane			Low		
VOA	24K1488-03	MW-1R	Dichlorodifluoromethane	Low	Low	Low		
VOA	24K1488-03	MW-1R	Tetrachloroethylene	Low		Low		
VOA	24K1488-03	MW-1R	Vinyl Chloride		Low	Low		
VOA	24K1488-04	MW-3	Bromoform	high				
VOA	24K1488-04	MW-3	Bromomethane	high	Low			
VOA	24K1488-04	MW-3	Chloromethane			Low		
VOA	24K1488-04	MW-3	Dichlorodifluoromethane	Low	Low	Low		
VOA	24K1488-04	MW-3	Tetrachloroethylene	Low		Low		
VOA	24K1488-04	MW-3	Vinyl Chloride		Low	Low		
VOA	24K1488-06	DUP	Bromoform	high				
VOA	24K1488-06	DUP	Bromomethane	high	Low			
VOA	24K1488-06	DUP	Chloromethane			Low		
VOA	24K1488-06	DUP	Dichlorodifluoromethane	Low	Low	Low		
VOA	24K1488-06	DUP	Tetrachloroethylene	Low		Low		
VOA	24K1488-06	DUP	Vinyl Chloride		Low	Low		
VOA	24K1488-07	Trip Blank	2-Hexanone		high			
VOA	24K1488-07	Trip Blank	Acetone		high			
VOA	24K1488-07	Trip Blank	Acrylonitrile		high	high		
VOA	24K1488-07	Trip Blank	Bromoform	high				
VOA	24K1488-07	Trip Blank	Bromomethane	high				
VOA	24K1488-07	Trip Blank	Dichlorodifluoromethane	Low	Low	Low		
VOA	24K1488-07	Trip Blank	Tetrachloroethylene	Low	Low	Low		
VOA	24K1488-07	Trip Blank	Tetrahydrofuran		high			

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	M2-4:2 FTS	PFSu-H
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	M2-6:2 FTS	PFSu-H
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	M3HFPO-DA	PFSu-H
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	M4PFHpA	PFSu-H
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	M5PFHxA	PFSu-H
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
VHB-MW-01	EPA 1633 Draft 3	24K1488-01	Water	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	PFSu-H
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	M2-4:2 FTS	PFSu-H
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	M2-6:2 FTS	PFSu-H
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	M3HFPO-DA	PFSu-H
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	Perfluoro-1-nonanesulfonic acid (PFNS)	J
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	PF-CCV-L
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	Perfluoroheptanoic acid (PFHpA)	PF-CCV-H
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	Perfluoro-n-butanoic acid (PFBA)	J
VHB-MW-02	EPA 1633 Draft 3	24K1488-02	Water	Perfluorononanoic acid (PFNA)	J
MW-1R	EPA 1633 Draft 3	24K1488-03	Water	M3HFPO-DA	PFSu-H
MW-1R	EPA 1633 Draft 3	24K1488-03	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
MW-1R	EPA 1633 Draft 3	24K1488-03	Water	Perfluoro-n-butanoic acid (PFBA)	J
MW-1R	EPA 1633 Draft 3	24K1488-03	Water	Perfluorononanoic acid (PFNA)	J
MW-3	EPA 1633 Draft 3	24K1488-04	Water	d3-N-MeFOSAA	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	M2-4:2 FTS	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	M2-6:2 FTS	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	M2-8:2 FTS	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	M3HFPO-DA	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	M3PFBS	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
MW-3	EPA 1633 Draft 3	24K1488-04	Water	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	PFSu-H
MW-3	EPA 1633 Draft 3	24K1488-04	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
MW-6	EPA 1633 Draft 3	24K1488-05	Water	M2-4:2 FTS	PFSu-H
MW-6	EPA 1633 Draft 3	24K1488-05	Water	M2-6:2 FTS	PFSu-H
MW-6	EPA 1633 Draft 3	24K1488-05	Water	Perfluoro-1-pentanesulfonate (PFPeS)	J
MW-6	EPA 1633 Draft 3	24K1488-05	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
MW-6	EPA 1633 Draft 3	24K1488-05	Water	Perfluorononanoic acid (PFNA)	J
DUP	EPA 1633 Draft 3	24K1488-06	Water	M2-4:2 FTS	PFSu-H
DUP	EPA 1633 Draft 3	24K1488-06	Water	M2-6:2 FTS	PFSu-H
DUP	EPA 1633 Draft 3	24K1488-06	Water	M3HFPO-DA	PFSu-H
DUP	EPA 1633 Draft 3	24K1488-06	Water	M4PFHpA	PFSu-H
DUP	EPA 1633 Draft 3	24K1488-06	Water	M5PFHxA	PFSu-H
DUP	EPA 1633 Draft 3	24K1488-06	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	PF-LCS-L
DUP	EPA 1633 Draft 3	24K1488-06	Water	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	PFSu-H
	EPA 1633 Draft 3	BK41691-BS2	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	BK41817-BS2	Water	11CL-PF3OUdS	J
	EPA 1633 Draft 3	BK41817-BS2	Water	9CL-PF3ONS	J
	EPA 1633 Draft 3	BK41817-BS2	Water	ADONA	J
	EPA 1633 Draft 3	BK41817-BS2	Water	HFPO-DA (Gen-X)	J
	EPA 1633 Draft 3	BK41817-BS2	Water	Perfluoro-4-oxapentanoic acid (PFMPA)	J
	EPA 1633 Draft 3	S4K2543-CCB1	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB1	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB1	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB2	Soil	d-N-EtFOSA	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4K2543-CCB2	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB2	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB2	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB3	Soil	M3HFPO-DA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB4	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB4	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB4	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB4	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB4	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB5	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB5	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB5	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB5	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB5	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	M7PFUDa	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB6	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB7	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB8	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCB9	Soil	M3HFPO-DA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBA	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBA	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBA	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBA	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	M2-6:2 FTS	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBB	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBC	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBD	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBE	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBE	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBE	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBE	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBE	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	M2-8:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBF	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2543-CCBG	Soil	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	M3HFPO-DA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	M7PFUdA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB1	Water	Perfluoro-n-[13C4]butanoic acid (MPFBA)	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	M3HFPO-DA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB2	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB3	Water	d7-N-MeFOSE	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB3	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB3	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB3	Water	M2-4:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4K2902-CCB3	Water	M2PFTeDA	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4L0238-CCB1	Water	d7-N-MeFOSE	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB1	Water	d9-N-EtFOSE	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB1	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	d7-N-MeFOSE	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	d9-N-EtFOSE	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	M7PFUDa	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB2	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB3	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB3	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB4	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB4	Water	M2-6:2 FTS	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB4	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB4	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB5	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB5	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB5	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB5	Water	M7PFUDa	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB5	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB6	Water	d-N-EtFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB6	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB6	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB6	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB7	Water	d-N-EtFOSA	PFSu-H

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
	EPA 1633 Draft 3	S4L0238-CCB7	Water	d-N-MeFOSA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB7	Water	M2PFTeDA	PFSu-H
	EPA 1633 Draft 3	S4L0238-CCB7	Water	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	PFSu-H
VHB-MW-01	EPA 6020B	24K1488-01	Water	Antimony	M-CCV1
VHB-MW-01	EPA 6020B	24K1488-01	Water	Barium	M-CCV1
VHB-MW-01	EPA 6020B	24K1488-01	Water	Cadmium	M-CCV1
VHB-MW-01	EPA 6020B	24K1488-01	Water	Selenium	B
MW-1R	EPA 6020B	24K1488-03	Water	Antimony	M-CCV1
MW-1R	EPA 6020B	24K1488-03	Water	Barium	M-CCV1
MW-1R	EPA 6020B	24K1488-03	Water	Cadmium	M-CCV1
MW-3	EPA 6020B	24K1488-04	Water	Antimony	M-CCV1
MW-3	EPA 6020B	24K1488-04	Water	Barium	M-CCV1
MW-3	EPA 6020B	24K1488-04	Water	Cadmium	M-CCV1
MW-3	EPA 6020B	24K1488-04	Water	Zinc	B
MW-6	EPA 6020B	24K1488-05	Water	Antimony	M-CCV1
MW-6	EPA 6020B	24K1488-05	Water	Barium	M-CCV1
MW-6	EPA 6020B	24K1488-05	Water	Cadmium	M-CCV1
MW-6	EPA 6020B	24K1488-05	Water	Copper	B
MW-6	EPA 6020B	24K1488-05	Water	Zinc	B
DUP	EPA 6020B	24K1488-06	Water	Antimony	M-CCV1
DUP	EPA 6020B	24K1488-06	Water	Barium	M-CCV1
DUP	EPA 6020B	24K1488-06	Water	Cadmium	M-CCV1
DUP	EPA 6020B	24K1488-06	Water	Copper	B
DUP	EPA 6020B	24K1488-06	Water	Zinc	B
	EPA 6020B	BK41554-BS1	Water	Selenium	B
	EPA 6020B	BK41663-BS1	Water	Copper	B
	EPA 6020B	BK41663-BS1	Water	Zinc	B
VHB-MW-01	EPA 8260C	24K1488-01	Water	Bromomethane	CCVE
VHB-MW-01	EPA 8260C	24K1488-01	Water	Chloromethane	QL-02
VHB-MW-01	EPA 8260C	24K1488-01	Water	Dichlorodifluoromethane	CCVE
VHB-MW-01	EPA 8260C	24K1488-01	Water	Dichlorodifluoromethane	ICVE
VHB-MW-01	EPA 8260C	24K1488-01	Water	Dichlorodifluoromethane	QL-02
VHB-MW-01	EPA 8260C	24K1488-01	Water	Tetrachloroethylene	ICVE
VHB-MW-01	EPA 8260C	24K1488-01	Water	Tetrachloroethylene	QL-02
VHB-MW-01	EPA 8260C	24K1488-01	Water	Vinyl Chloride	QL-02
VHB-MW-01	EPA 8260C	24K1488-01	Water	Vinyl Chloride	CCVE
MW-1R	EPA 8260C	24K1488-03	Water	Bromomethane	CCVE
MW-1R	EPA 8260C	24K1488-03	Water	Chloromethane	QL-02
MW-1R	EPA 8260C	24K1488-03	Water	Dichlorodifluoromethane	QL-02
MW-1R	EPA 8260C	24K1488-03	Water	Dichlorodifluoromethane	ICVE
MW-1R	EPA 8260C	24K1488-03	Water	Dichlorodifluoromethane	CCVE
MW-1R	EPA 8260C	24K1488-03	Water	Tetrachloroethylene	ICVE
MW-1R	EPA 8260C	24K1488-03	Water	Tetrachloroethylene	QL-02

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
MW-1R	EPA 8260C	24K1488-03	Water	Vinyl Chloride	QL-02
MW-1R	EPA 8260C	24K1488-03	Water	Vinyl Chloride	CCVE
MW-3	EPA 8260C	24K1488-04	Water	Bromomethane	CCVE
MW-3	EPA 8260C	24K1488-04	Water	Chloromethane	QL-02
MW-3	EPA 8260C	24K1488-04	Water	Dichlorodifluoromethane	QL-02
MW-3	EPA 8260C	24K1488-04	Water	Dichlorodifluoromethane	ICVE
MW-3	EPA 8260C	24K1488-04	Water	Dichlorodifluoromethane	CCVE
MW-3	EPA 8260C	24K1488-04	Water	Tetrachloroethylene	ICVE
MW-3	EPA 8260C	24K1488-04	Water	Tetrachloroethylene	QL-02
MW-3	EPA 8260C	24K1488-04	Water	Vinyl Chloride	QL-02
MW-3	EPA 8260C	24K1488-04	Water	Vinyl Chloride	CCVE
DUP	EPA 8260C	24K1488-06	Water	Bromomethane	CCVE
DUP	EPA 8260C	24K1488-06	Water	Chloromethane	QL-02
DUP	EPA 8260C	24K1488-06	Water	Dichlorodifluoromethane	CCVE
DUP	EPA 8260C	24K1488-06	Water	Dichlorodifluoromethane	QL-02
DUP	EPA 8260C	24K1488-06	Water	Dichlorodifluoromethane	ICVE
DUP	EPA 8260C	24K1488-06	Water	Tetrachloroethylene	QL-02
DUP	EPA 8260C	24K1488-06	Water	Tetrachloroethylene	ICVE
DUP	EPA 8260C	24K1488-06	Water	Vinyl Chloride	CCVE
DUP	EPA 8260C	24K1488-06	Water	Vinyl Chloride	QL-02
Trip Blank	EPA 8260C	24K1488-07	Water	Acrylonitrile	CCVE
Trip Blank	EPA 8260C	24K1488-07	Water	Acrylonitrile	QL-02
Trip Blank	EPA 8260C	24K1488-07	Water	Dichlorodifluoromethane	ICVE
Trip Blank	EPA 8260C	24K1488-07	Water	Dichlorodifluoromethane	CCVE
Trip Blank	EPA 8260C	24K1488-07	Water	Dichlorodifluoromethane	QL-02
Trip Blank	EPA 8260C	24K1488-07	Water	Tetrachloroethylene	QL-02
Trip Blank	EPA 8260C	24K1488-07	Water	Tetrachloroethylene	CCVE
Trip Blank	EPA 8260C	24K1488-07	Water	Tetrachloroethylene	ICVE
	EPA 8260C	S4K1907-SCV1	Water	Bromoform	ICVE20
	EPA 8260C	S4K1907-SCV1	Water	Bromoform	ICVE
	EPA 8260C	S4K1907-SCV1	Water	Bromomethane	ICVE
	EPA 8260C	S4K1907-SCV1	Water	Bromomethane	ICVE20
	EPA 8260C	S4K1907-SCV1	Water	Dichlorodifluoromethane	ICVE
	EPA 8260C	S4K1907-SCV1	Water	Dichlorodifluoromethane	ICVE20
	EPA 8260C	S4K1907-SCV1	Water	Tetrachloroethylene	ICVE
	EPA 8260C	S4K1907-SCV1	Water	Tetrachloroethylene	ICVE20
VHB-MW-01	EPA 8270D SIM	24K1488-01	Water	Dibenzo(a,h)anthracene	CCVE
MW-1R	EPA 8270D SIM	24K1488-03	Water	Dibenzo(a,h)anthracene	CCVE
MW-3	EPA 8270D SIM	24K1488-04	Water	Dibenzo(a,h)anthracene	CCVE
MW-6	EPA 8270D SIM	24K1488-05	Water	Acenaphthene	ICVE20
MW-6	EPA 8270D SIM	24K1488-05	Water	Acenaphthylene	ICVE
MW-6	EPA 8270D SIM	24K1488-05	Water	Dibenzo(a,h)anthracene	CCVE
MW-6	EPA 8270D SIM	24K1488-05	Water	Fluoranthene	ICVE20
MW-6	EPA 8270D SIM	24K1488-05	Water	Fluorene	ICVE
MW-6	EPA 8270D SIM	24K1488-05	Water	Naphthalene	ICVE20

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Qualifier Summary Report:

SampleID	Method	LabNumber	Matrix	Analyte	Qualifier
MW-6	EPA 8270D SIM	24K1488-05	Water	Phenanthrene	ICVE20
DUP	EPA 8270D SIM	24K1488-06	Water	Acenaphthene	ICVE20
DUP	EPA 8270D SIM	24K1488-06	Water	Acenaphthylene	ICVE
DUP	EPA 8270D SIM	24K1488-06	Water	Anthracene	ICVE
DUP	EPA 8270D SIM	24K1488-06	Water	Dibenzo(a,h)anthracene	CCVE
DUP	EPA 8270D SIM	24K1488-06	Water	Fluoranthene	ICVE20
DUP	EPA 8270D SIM	24K1488-06	Water	Fluorene	ICVE
DUP	EPA 8270D SIM	24K1488-06	Water	Naphthalene	ICVE20
DUP	EPA 8270D SIM	24K1488-06	Water	Phenanthrene	ICVE20

Qualifier Definitions :

B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) was outside the 90-110% recovery criteria.
PF-CCV-H	The CCV recovery for this PFAS compound was above control limits.
PF-CCV-L	The CCV recovery for this PFAS compound was below control limits.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.

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4.0 Analysis Issues

EPA 8260C

VOA, 8260 RCP LOW MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SK40026

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SK40026	S4K1907	S4K1907	Secondary Cal Check	S4K1907-SCV1	VOA No. 10	V10C08465.D
SK40026	S4K2530	S4K2530	Calibration Check	S4K2530-CCV1	VOA No. 10	V10C08690.D
SK40026	BK41575	S4K2530	LCS	BK41575-BS1	VOA No. 10	V10C08692.D
SK40026	BK41575	S4K2530	LCS Dup	BK41575-BSD1	VOA No. 10	V10C08693.D
SK40026	BK41575	S4K2530	Blank	BK41575-BLK1	VOA No. 10	V10C08695.D
SK40026	BK41575	S4K2530	VHB-MW-01	24K1488-01	VOA No. 10	V10C08709.D
SK40026	BK41575	S4K2530	MW-1R	24K1488-03	VOA No. 10	V10C08710.D
SK40026	BK41575	S4K2530	MW-3	24K1488-04	VOA No. 10	V10C08711.D
SK40026	BK41575	S4K2530	DUP	24K1488-06	VOA No. 10	V10C08712.D
SK40026	S4K2534	S4K2534	Calibration Check	S4K2534-CCV1	VOA No. 10	V10C08717.D
SK40026	BK41621	S4K2534	LCS	BK41621-BS1	VOA No. 10	V10C08725.D
SK40026	BK41621	S4K2534	Blank	BK41621-BLK1	VOA No. 10	V10C08727.D
SK40026	BK41621	S4K2534	Trip Blank	24K1488-07	VOA No. 10	V10C08728.D

Initial calibration for EPA 8260C exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SK40026	VOA No. 10	11/18/2024 7:00:22 AM	V10C08454.D

Analyte	RSD%	RSDLim	<MinRRF	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
1,2-Dibromo-3-chloropropane	9.85	15	0.0392	0.05				Avg
Tetrahydrofuran	13.56	15	0.0404	0.05				Avg

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4K1907-SCV1		V10C08465.D
Calibration Check	S4K2530-CCV1		V10C08690.D
LCS	BK41575-BS1		V10C08692.D
LCS Dup	BK41575-BSD1		V10C08693.D
Blank	BK41575-BLK1		V10C08695.D
VHB-MW-01	24K1488-01		V10C08709.D
MW-1R	24K1488-03		V10C08710.D
MW-3	24K1488-04		V10C08711.D
DUP	24K1488-06		V10C08712.D
Calibration Check	S4K2534-CCV1		V10C08717.D
LCS	BK41621-BS1		V10C08725.D
Blank	BK41621-BLK1		V10C08727.D
Trip Blank	24K1488-07		V10C08728.D

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EPA 8260C

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8260C

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SK40026	S4K1907-SCV1	Bromoform	10.0	12.1	121	80 - 120
SK40026	S4K1907-SCV1	Bromomethane	10.0	12.3	123	80 - 120
SK40026	S4K1907-SCV1	Dichlorodifluoromethane	10.0	5.11	51.1	80 - 120
SK40026	S4K1907-SCV1	Tetrachloroethylene	10.0	5.83	58.3	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4K2530-CCV1	Calibration Check	V10C08690.D
BK41575-BS1	LCS	V10C08692.D
BK41575-BSD1	LCS Dup	V10C08693.D
BK41575-BLK1	Blank	V10C08695.D
24K1488-01	VHB-MW-01	V10C08709.D
24K1488-03	MW-1R	V10C08710.D
24K1488-04	MW-3	V10C08711.D
24K1488-06	DUP	V10C08712.D
S4K2534-CCV1	Calibration Check	V10C08717.D
BK41621-BS1	LCS	V10C08725.D
BK41621-BLK1	Blank	V10C08727.D
24K1488-07	Trip Blank	V10C08728.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SK40026	S4K2530	S4K2530-CCV1	V10C08690.D	11/22/24 20:02
SK40026	S4K2534	S4K2534-CCV1	V10C08717.D	11/23/24 10:01

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SK40026	S4K2530-CCV1	Bromomethane	ug/L	6.78	10.0	67.8	70 130	V10C08690.D
SK40026	S4K2530-CCV1	Dichlorodifluoromethane	ug/L	4.62	10.0	46.2	70 130	V10C08690.D
SK40026	S4K2530-CCV1	Vinyl Chloride	ug/L	7.45	10.0	74.5	80 120	V10C08690.D
SK40026	S4K2534-CCV1	2-Hexanone	ug/L	13.2	10.0	132	70 130	V10C08717.D
SK40026	S4K2534-CCV1	Acetone	ug/L	13.3	10.0	133	70 130	V10C08717.D
SK40026	S4K2534-CCV1	Acrylonitrile	ug/L	13.4	10.0	134	70 130	V10C08717.D
SK40026	S4K2534-CCV1	Dichlorodifluoromethane	ug/L	6.16	10.0	61.6	70 130	V10C08717.D
SK40026	S4K2534-CCV1	Tetrachloroethylene	ug/L	5.15	10.0	51.5	70 130	V10C08717.D
SK40026	S4K2534-CCV1	Tetrahydrofuran	ug/L	13.2	10.0	132	70 130	V10C08717.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SK40026	S4K2530	BK41575-BS1	LCS		V10C08692.D
SK40026	S4K2530	BK41575-BSD1	LCS Dup		V10C08693.D
SK40026	S4K2530	BK41575-BLK1	Blank		V10C08695.D
SK40026	S4K2530	24K1488-01	VHB-MW-01		V10C08709.D
SK40026	S4K2530	24K1488-03	MW-1R		V10C08710.D
SK40026	S4K2530	24K1488-04	MW-3		V10C08711.D
SK40026	S4K2530	24K1488-06	DUP		V10C08712.D
SK40026	S4K2534	BK41621-BS1	LCS		V10C08725.D

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SK40026	S4K2534	BK41621-BLK1	Blank	V10C08727.D
SK40026	S4K2534	24K1488-07	Trip Blank	V10C08728.D

EPA 8260C

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
VOA	BK41575	S4K2530	VOA No. 10	BK41575-BLK1	V10C08695.D
VOA	BK41621	S4K2534	VOA No. 10	BK41621-BLK1	V10C08727.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID				
SK40026	4K2530	BK41575-BS1	LCS	V10C08692.D				
SK40026	4K2530	BK41575-BSD1	LCS Dup	V10C08693.D				
SK40026	4K2534	BK41621-BS1	LCS	V10C08725.D				
Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4K2530	LCS	BK41575-BS1	Tetrachloroethylene		50.9		70 - 130	
S4K2530	LCS Dup	BK41575-BSD1	Chloromethane	90.4	45.8	65.5	70 - 130	30
S4K2530	LCS Dup	BK41575-BSD1	Dichlorodifluoromethane	82.0	16.5	133	70 - 130	30
S4K2530	LCS Dup	BK41575-BSD1	Tetrachloroethylene	50.9	49.6	2.59	70 - 130	30
S4K2530	LCS Dup	BK41575-BSD1	Vinyl Chloride	95.2	54.8	53.9	70 - 130	30
S4K2534	LCS	BK41621-BS1	Acrylonitrile		132		70 - 130	
S4K2534	LCS	BK41621-BS1	Dichlorodifluoromethane		58.5		70 - 130	
S4K2534	LCS	BK41621-BS1	Tetrachloroethylene		54.9		70 - 130	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BK41575	24K1488-01	VHB-MW-01	
BK41575	24K1488-03	MW-1R	
BK41575	24K1488-04	MW-3	
BK41575	24K1488-06	DUP	
BK41621	24K1488-07	Trip Blank	
BK41575	BK41575-BLK1	Blank	
BK41621	BK41621-BLK1	Blank	

EPA 8260C

Dilutions: No sample dilutions were required.

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EPA 8260C

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 8270D

SVOA, 8270 LOW RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SI40031

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SI40031	S4I2329	S4I2329	Secondary Cal Check	S4I2329-SCV1	BNA #1	BNA1-029370.D
SI40031	S4K2642	S4K2642	Calibration Check	S4K2642-CCV1	BNA #1	BNA1-030437.D
SI40031	BK41675	S4K2642	VHB-MW-01	24K1488-01	BNA #1	BNA1-030440.D
SI40031	BK41675	S4K2642	MW-1R	24K1488-03	BNA #1	BNA1-030442.D
SI40031	BK41675	S4K2642	MW-3	24K1488-04	BNA #1	BNA1-030444.D
SI40031	BK41675	S4K2642	MW-6	24K1488-05	BNA #1	BNA1-030445.D
SI40031	BK41675	S4K2642	DUP	24K1488-06	BNA #1	BNA1-030448.D

Initial calibration for EPA 8270D met method guidelines.

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SI40031	S4K2642	S4K2642-CCV1	BNA1-030437.D	11/26/24 10:13

The continuing calibration verification recovered within method limits.

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

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EPA 8270D

Dilutions: No sample dilutions were required.

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 8270D

SVOA, 8270 LOW RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SK40007

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SK40007	S4K0405	S4K0405	Secondary Cal Check	S4K0405-SCV1	MSBNA9	E900323736.D

Initial calibration for EPA 8270D **met method guidelines.**

EPA 8270D

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

EPA 8270D

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

EPA 8270D

Dilutions: No sample dilutions were required.

EPA 8270D

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 8270D SIM SIM Analysis

SVOA, 8270 SIM RCP MASTER

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SK40012

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SK40012	S4K0820	S4K0820	Secondary Cal Check	S4K0820-SCV1	BNA #5	SV500559.D
SK40012	S4K2639	S4K2639	Calibration Check	S4K2639-CCV1	BNA #5	SV500810.D
SK40012	BK41675	S4K2639	Blank	BK41675-BLK2	BNA #5	SV500811.D
SK40012	BK41675	S4K2639	VHB-MW-01	24K1488-01	BNA #5	SV500820.D
SK40012	BK41675	S4K2639	MW-1R	24K1488-03	BNA #5	SV500821.D
SK40012	BK41675	S4K2639	MW-3	24K1488-04	BNA #5	SV500822.D
SK40012	BK41675	S4K2639	MW-6	24K1488-05	BNA #5	SV500823.D
SK40012	BK41675	S4K2639	DUP	24K1488-06	BNA #5	SV500824.D

Initial calibration for EPA 8270D SIM met method guidelines.

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EPA 8270D SIM

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 8270D SIM

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
SK40012	S4K0820-SCV1	Acenaphthene	1.00	1.29	129	80 - 120
SK40012	S4K0820-SCV1	Acenaphthylene	1.00	1.34	134	80 - 120
SK40012	S4K0820-SCV1	Anthracene	1.00	1.33	133	80 - 120
SK40012	S4K0820-SCV1	Benzo(a)anthracene	1.00	1.21	121	80 - 120
SK40012	S4K0820-SCV1	Benzo(a)pyrene	1.00	1.22	122	80 - 120
SK40012	S4K0820-SCV1	Benzo(g,h,i)perylene	1.00	1.28	128	80 - 120
SK40012	S4K0820-SCV1	Benzo(k)fluoranthene	1.00	1.30	130	80 - 120
SK40012	S4K0820-SCV1	Chrysene	1.00	1.21	121	80 - 120
SK40012	S4K0820-SCV1	Dibenzo(a,h)anthracene	1.00	1.24	124	80 - 120
SK40012	S4K0820-SCV1	Fluoranthene	1.00	1.28	128	80 - 120
SK40012	S4K0820-SCV1	Fluorene	1.00	1.36	136	80 - 120
SK40012	S4K0820-SCV1	Indeno(1,2,3-cd)pyrene	1.00	1.29	129	80 - 120
SK40012	S4K0820-SCV1	Naphthalene	1.00	1.28	128	80 - 120
SK40012	S4K0820-SCV1	Phenanthrene	1.00	1.28	128	80 - 120
SK40012	S4K0820-SCV1	Pyrene	1.00	1.21	121	80 - 120

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4K2639-CCV1	Calibration Check	SV500810.D
24K1488-05	MW-6	SV500823.D
24K1488-06	DUP	SV500824.D

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SK40012	S4K2639	S4K2639-CCV1	SV500810.D	11/26/24 08:56

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SK40012	S4K2639-CCV1	Dibenzo(a,h)anthracene	ug/mL	0.690	1.00	69	70 130	SV500810.D

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SK40012	S4K2639	BK41675-BLK2	Blank		SV500811.D
SK40012	S4K2639	24K1488-01	VHB-MW-01		SV500820.D
SK40012	S4K2639	24K1488-03	MW-1R		SV500821.D
SK40012	S4K2639	24K1488-04	MW-3		SV500822.D
SK40012	S4K2639	24K1488-05	MW-6		SV500823.D
SK40012	S4K2639	24K1488-06	DUP		SV500824.D

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EPA 8270D SIM

SIM Analysis

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
SVOA	BK41675	S4K2639	BNA #5	BK41675-BLK2	SV500811.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

EPA 8270D SIM

SIM Analysis

Dilutions: No sample dilutions were required.

EPA 8270D SIM

SIM Analysis

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 1633 Draft 3

PFAS, EPA 1633 Target List

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SK40019

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SK40019	S4K1306	S4K1306	Secondary Cal Check	S4K1306-SCV1	LCQQQ	QQQ46077.d
SK40019	S4K1306	S4K1306	Calibration Check	S4K1306-CCV1	LCQQQ	QQQ46082.d
SK40019	S4K1306	S4K1306	Calibration Blank	S4K1306-CCB1	LCQQQ	QQQ46083.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV1	LCQQQ	QQQ46604.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB1	LCQQQ	QQQ46606.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV2	LCQQQ	QQQ46622.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB2	LCQQQ	QQQ46623.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV3	LCQQQ	QQQ46633.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB3	LCQQQ	QQQ46634.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV4	LCQQQ	QQQ46648.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB4	LCQQQ	QQQ46649.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV5	LCQQQ	QQQ46661.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB5	LCQQQ	QQQ46662.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV6	LCQQQ	QQQ46677.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB6	LCQQQ	QQQ46678.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV7	LCQQQ	QQQ46690.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB7	LCQQQ	QQQ46691.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV8	LCQQQ	QQQ46706.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB8	LCQQQ	QQQ46707.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCV9	LCQQQ	QQQ46718.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCB9	LCQQQ	QQQ46719.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVA	LCQQQ	QQQ46734.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBA	LCQQQ	QQQ46735.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVB	LCQQQ	QQQ46746.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBB	LCQQQ	QQQ46747.d
SK40019	BK41691	S4K2543	Blank	BK41691-BLK1	LCQQQ	QQQ46752.d
SK40019	BK41691	S4K2543	LCS	BK41691-BS1	LCQQQ	QQQ46753.d
SK40019	BK41691	S4K2543	LCS	BK41691-BS2	LCQQQ	QQQ46754.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVC	LCQQQ	QQQ46759.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBC	LCQQQ	QQQ46760.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVD	LCQQQ	QQQ46771.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBD	LCQQQ	QQQ46772.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVE	LCQQQ	QQQ46780.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBE	LCQQQ	QQQ46781.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVF	LCQQQ	QQQ46802.d
SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBF	LCQQQ	QQQ46803.d
SK40019	BK41691	S4K2543	VHB-MW-02	24K1488-02	LCQQQ	QQQ46804.d
SK40019	S4K2543	S4K2543	Calibration Check	S4K2543-CCVG	LCQQQ	QQQ46806.d

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4.0 Analysis Issues

SK40019	S4K2543	S4K2543	Calibration Blank	S4K2543-CCBG	LCQQQ	QQQ46807.d
SK40019	S4K2902	S4K2902	Calibration Check	S4K2902-CCV1	LCQQQ	QQQ46923.d
SK40019	S4K2902	S4K2902	Calibration Blank	S4K2902-CCB1	LCQQQ	QQQ46925.d
SK40019	BK41817	S4K2902	Blank	BK41817-BLK1	LCQQQ	QQQ46926.d
SK40019	BK41817	S4K2902	LCS	BK41817-BS1	LCQQQ	QQQ46927.d
SK40019	BK41817	S4K2902	LCS	BK41817-BS2	LCQQQ	QQQ46928.d
SK40019	BK41817	S4K2902	VHB-MW-01	24K1488-01	LCQQQ	QQQ46934.d
SK40019	BK41817	S4K2902	MW-1R	24K1488-03	LCQQQ	QQQ46935.d
SK40019	BK41817	S4K2902	MW-3	24K1488-04	LCQQQ	QQQ46936.d
SK40019	BK41817	S4K2902	MW-6	24K1488-05	LCQQQ	QQQ46937.d
SK40019	BK41817	S4K2902	DUP	24K1488-06	LCQQQ	QQQ46938.d
SK40019	S4K2902	S4K2902	Calibration Check	S4K2902-CCV2	LCQQQ	QQQ46939.d
SK40019	S4K2902	S4K2902	Calibration Blank	S4K2902-CCB2	LCQQQ	QQQ46940.d
SK40019	S4K2902	S4K2902	Calibration Check	S4K2902-CCV3	LCQQQ	QQQ46953.d
SK40019	S4K2902	S4K2902	Calibration Blank	S4K2902-CCB3	LCQQQ	QQQ46954.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV1	LCQQQ	QQQ46960.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB1	LCQQQ	QQQ46962.d
SK40019	BK41817	S4L0238	MW-3	24K1488-04RE1	LCQQQ	QQQ47041.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV2	LCQQQ	QQQ47042.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB2	LCQQQ	QQQ47043.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV3	LCQQQ	QQQ47056.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB3	LCQQQ	QQQ47057.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV4	LCQQQ	QQQ47071.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB4	LCQQQ	QQQ47072.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV5	LCQQQ	QQQ47085.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB5	LCQQQ	QQQ47086.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV6	LCQQQ	QQQ47100.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB6	LCQQQ	QQQ47101.d
SK40019	S4L0238	S4L0238	Calibration Check	S4L0238-CCV7	LCQQQ	QQQ47112.d
SK40019	S4L0238	S4L0238	Calibration Blank	S4L0238-CCB7	LCQQQ	QQQ47113.d

Initial calibration for EPA 1633 Draft 3 exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SK40019	LCQQQ	11/12/2024 8:00:31 AM	QQQ46069.d

The following QC and or client samples were affected:

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EPA 1633 Draft 3

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 1633 Draft 3

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SK40019	S4K1306	S4K1306-CCV1	QQQ46082.d	11/12/24 22:33
SK40019	S4K2543	S4K2543-CCV1	QQQ46604.d	11/25/24 05:45
SK40019	S4K2543	S4K2543-CCV2	QQQ46622.d	11/25/24 10:35
SK40019	S4K2543	S4K2543-CCV3	QQQ46633.d	11/25/24 13:33
SK40019	S4K2543	S4K2543-CCV4	QQQ46648.d	11/25/24 17:35
SK40019	S4K2543	S4K2543-CCV5	QQQ46661.d	11/25/24 21:05
SK40019	S4K2543	S4K2543-CCV6	QQQ46677.d	11/26/24 01:23
SK40019	S4K2543	S4K2543-CCV7	QQQ46690.d	11/26/24 04:53
SK40019	S4K2543	S4K2543-CCV8	QQQ46706.d	11/26/24 09:11
SK40019	S4K2543	S4K2543-CCV9	QQQ46718.d	11/26/24 12:25
SK40019	S4K2543	S4K2543-CCVA	QQQ46734.d	11/26/24 16:44
SK40019	S4K2543	S4K2543-CCVB	QQQ46746.d	11/26/24 19:58
SK40019	S4K2543	S4K2543-CCVC	QQQ46759.d	11/26/24 23:28
SK40019	S4K2543	S4K2543-CCVD	QQQ46771.d	11/27/24 02:41
SK40019	S4K2543	S4K2543-CCVE	QQQ46780.d	11/27/24 05:07
SK40019	S4K2543	S4K2543-CCVF	QQQ46802.d	11/27/24 10:10
SK40019	S4K2543	S4K2543-CCVG	QQQ46806.d	11/27/24 11:18
SK40019	S4K2902	S4K2902-CCV1	QQQ46923.d	11/28/24 14:29
SK40019	S4K2902	S4K2902-CCV2	QQQ46939.d	11/28/24 18:47
SK40019	S4K2902	S4K2902-CCV3	QQQ46953.d	11/28/24 22:33
SK40019	S4L0238	S4L0238-CCV1	QQQ46960.d	12/02/24 15:47
SK40019	S4L0238	S4L0238-CCV2	QQQ47042.d	12/02/24 18:16
SK40019	S4L0238	S4L0238-CCV3	QQQ47056.d	12/02/24 22:02
SK40019	S4L0238	S4L0238-CCV4	QQQ47071.d	12/03/24 02:04
SK40019	S4L0238	S4L0238-CCV5	QQQ47085.d	12/03/24 05:50
SK40019	S4L0238	S4L0238-CCV6	QQQ47100.d	12/03/24 09:52
SK40019	S4L0238	S4L0238-CCV7	QQQ47112.d	12/03/24 13:05

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
SK40019	S4K1306-CCV1	M2PFTeDA	ng/mL	1.37	1.04	132	70 130	QQQ46082.d
SK40019	S4K1306-CCV1	d-N-EtFOSA	ng/mL	2.80	2.08	135	70 130	QQQ46082.d
SK40019	S4K2543-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.61	1.04	155	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	M2PFTeDA	ng/mL	1.75	1.04	168	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	M2-6:2 FTS	ng/mL	8.54	3.96	216	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	M2-8:2 FTS	ng/mL	7.26	4.00	181	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	M2-4:2 FTS	ng/mL	7.02	3.91	179	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	d-N-MeFOSA	ng/mL	3.14	2.08	151	70 130	QQQ46604.d
SK40019	S4K2543-CCV1	d-N-EtFOSA	ng/mL	3.53	2.08	170	70 130	QQQ46604.d
SK40019	S4K2543-CCV2	M7PFUDa	ng/mL	1.38	1.04	133	70 130	QQQ46622.d

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SK40019	S4K2543-CCV2	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.52	1.04	146	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	M2PFTeDA	ng/mL	2.05	1.04	197	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	M2-6:2 FTS	ng/mL	6.72	3.96	170	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	M2-8:2 FTS	ng/mL	6.73	4.00	168	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	M2-4:2 FTS	ng/mL	6.52	3.91	167	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	d-N-MeFOSA	ng/mL	3.46	2.08	167	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	d-N-EtFOSA	ng/mL	3.91	2.08	188	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	d9-N-EtFOSE	ng/mL	28.1	20.8	135	70	130	QQQ46622.d
SK40019	S4K2543-CCV2	d7-N-MeFOSE	ng/mL	27.2	20.8	131	70	130	QQQ46622.d
SK40019	S4K2543-CCV3	M7PFUDa	ng/mL	1.38	1.04	133	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.65	1.04	158	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	M2PFTeDA	ng/mL	2.32	1.04	224	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	M2-6:2 FTS	ng/mL	7.52	3.96	190	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	M2-8:2 FTS	ng/mL	7.09	4.00	177	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	M2-4:2 FTS	ng/mL	6.60	3.91	169	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	d-N-MeFOSA	ng/mL	3.59	2.08	173	70	130	QQQ46633.d
SK40019	S4K2543-CCV3	d-N-EtFOSA	ng/mL	3.60	2.08	173	70	130	QQQ46633.d
SK40019	S4K2543-CCV4	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.32	2.42	137	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	Perfluoro-1-nonanesulfonic acid (PFNS)	ng/mL	3.20	2.40	133	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.53	1.04	147	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	M2PFTeDA	ng/mL	2.29	1.04	220	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	M2-6:2 FTS	ng/mL	7.36	3.96	186	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	M2-8:2 FTS	ng/mL	7.24	4.00	181	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	M2-4:2 FTS	ng/mL	6.43	3.91	164	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	d-N-MeFOSA	ng/mL	3.43	2.08	165	70	130	QQQ46648.d
SK40019	S4K2543-CCV4	d-N-EtFOSA	ng/mL	4.07	2.08	196	70	130	QQQ46648.d
SK40019	S4K2543-CCV5	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.60	1.04	154	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	M2PFTeDA	ng/mL	2.41	1.04	232	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	M2-6:2 FTS	ng/mL	7.88	3.96	199	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	M2-8:2 FTS	ng/mL	7.45	4.00	186	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	M2-4:2 FTS	ng/mL	6.71	3.91	172	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	d-N-MeFOSA	ng/mL	3.62	2.08	174	70	130	QQQ46661.d
SK40019	S4K2543-CCV5	d-N-EtFOSA	ng/mL	4.37	2.08	210	70	130	QQQ46661.d
SK40019	S4K2543-CCV6	M4PFHpA	ng/mL	2.75	2.08	132	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	M7PFUDa	ng/mL	1.45	1.04	139	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.69	1.04	163	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	M2PFTeDA	ng/mL	2.24	1.04	215	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	M2-6:2 FTS	ng/mL	7.80	3.96	197	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	M2-8:2 FTS	ng/mL	7.34	4.00	183	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	M2-4:2 FTS	ng/mL	6.91	3.91	177	70	130	QQQ46677.d
SK40019	S4K2543-CCV6	d-N-MeFOSA	ng/mL	3.50	2.08	168	70	130	QQQ46677.d

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SK40019	S4K2543-CCV6	d-N-EtFOSA	ng/mL	4.09	2.08	196	70	130	QQQ46677.d
SK40019	S4K2543-CCV7	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.43	2.42	142	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.44	1.04	139	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	M2PFTeDA	ng/mL	2.16	1.04	208	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.77	2.08	133	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	d3-N-MeFOSAA	ng/mL	5.97	4.16	144	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	d5-N-EtFOSAA	ng/mL	5.99	4.16	144	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	M2-6:2 FTS	ng/mL	7.49	3.96	189	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	M2-8:2 FTS	ng/mL	7.18	4.00	179	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	M2-4:2 FTS	ng/mL	6.40	3.91	164	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	d-N-MeFOSA	ng/mL	3.73	2.08	179	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	d-N-EtFOSA	ng/mL	4.36	2.08	209	70	130	QQQ46690.d
SK40019	S4K2543-CCV7	M3HFPO-DA	ng/mL	11.2	8.35	134	70	130	QQQ46690.d
SK40019	S4K2543-CCV8	M2PFTeDA	ng/mL	2.13	1.04	205	70	130	QQQ46706.d
SK40019	S4K2543-CCV8	M2-6:2 FTS	ng/mL	7.78	3.96	196	70	130	QQQ46706.d
SK40019	S4K2543-CCV8	M2-8:2 FTS	ng/mL	7.74	4.00	193	70	130	QQQ46706.d
SK40019	S4K2543-CCV8	M2-4:2 FTS	ng/mL	6.53	3.91	167	70	130	QQQ46706.d
SK40019	S4K2543-CCV8	d-N-MeFOSA	ng/mL	3.33	2.08	160	70	130	QQQ46706.d
SK40019	S4K2543-CCV8	d-N-EtFOSA	ng/mL	3.71	2.08	178	70	130	QQQ46706.d
SK40019	S4K2543-CCV9	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.44	2.42	142	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	Perfluoro-1-nonanesulfonic acid (PFNS)	ng/mL	3.16	2.40	132	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M7PFUdA	ng/mL	1.39	1.04	134	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.92	1.04	184	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M2PFTeDA	ng/mL	2.56	1.04	246	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M2-6:2 FTS	ng/mL	7.42	3.96	187	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M2-8:2 FTS	ng/mL	7.71	4.00	193	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M2-4:2 FTS	ng/mL	6.73	3.91	172	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	d-N-MeFOSA	ng/mL	3.29	2.08	158	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	d-N-EtFOSA	ng/mL	3.90	2.08	187	70	130	QQQ46718.d
SK40019	S4K2543-CCV9	M3HFPO-DA	ng/mL	11.0	8.35	131	70	130	QQQ46718.d
SK40019	S4K2543-CCVA	M2PFTeDA	ng/mL	2.10	1.04	202	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.0	8.35	132	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.82	2.00	141	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.82	2.08	136	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	d3-N-MeFOSAA	ng/mL	6.51	4.16	157	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	d5-N-EtFOSAA	ng/mL	6.99	4.16	168	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	M2-6:2 FTS	ng/mL	9.38	3.96	237	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	M2-8:2 FTS	ng/mL	7.97	4.00	199	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	M2-4:2 FTS	ng/mL	6.49	3.91	166	70	130	QQQ46734.d

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SK40019	S4K2543-CCVA	d-N-MeFOSA	ng/mL	3.25	2.08	156	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	d-N-EtFOSA	ng/mL	3.13	2.08	151	70	130	QQQ46734.d
SK40019	S4K2543-CCVA	M3HFPO-DA	ng/mL	11.1	8.35	132	70	130	QQQ46734.d
SK40019	S4K2543-CCVB	M3PFBS	ng/mL	2.73	1.94	141	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M5PFHxA	ng/mL	2.93	2.08	141	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M4PFHpA	ng/mL	2.86	2.08	138	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M3PFHxS	ng/mL	2.89	1.98	146	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.75	2.08	132	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M6PFDA	ng/mL	1.46	1.04	140	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M7PFUDa	ng/mL	1.60	1.04	154	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	2.00	1.04	192	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M2PFTeDA	ng/mL	2.67	1.04	257	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.3	8.35	135	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.67	2.00	133	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.51	4.16	133	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.77	2.08	133	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	d3-N-MeFOSAA	ng/mL	5.94	4.16	143	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	d5-N-EtFOSAA	ng/mL	6.01	4.16	145	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M2-6:2 FTS	ng/mL	9.22	3.96	233	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M2-8:2 FTS	ng/mL	7.34	4.00	183	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M2-4:2 FTS	ng/mL	8.13	3.91	208	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	d-N-MeFOSA	ng/mL	3.98	2.08	192	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	d-N-EtFOSA	ng/mL	4.65	2.08	224	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	M3HFPO-DA	ng/mL	13.9	8.35	167	70	130	QQQ46746.d
SK40019	S4K2543-CCVB	d9-N-EtFOSE	ng/mL	27.4	20.8	132	70	130	QQQ46746.d
SK40019	S4K2543-CCVC	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.30	2.42	136	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M5PFHxA	ng/mL	2.77	2.08	133	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M4PFHpA	ng/mL	2.87	2.08	138	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M3PFHxS	ng/mL	2.66	1.98	134	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.78	2.08	134	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M6PFDA	ng/mL	1.39	1.04	134	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M7PFUDa	ng/mL	1.70	1.04	163	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.83	1.04	176	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M2PFTeDA	ng/mL	3.07	1.04	296	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.9	8.35	143	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.77	2.08	133	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	d3-N-MeFOSAA	ng/mL	5.85	4.16	141	70	130	QQQ46759.d

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SK40019	S4K2543-CCVC	d5-N-EtFOSAA	ng/mL	5.68	4.16	136	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M2-6:2 FTS	ng/mL	8.90	3.96	225	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M2-8:2 FTS	ng/mL	7.28	4.00	182	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	M2-4:2 FTS	ng/mL	7.59	3.91	194	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	d-N-MeFOSA	ng/mL	3.71	2.08	179	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	d-N-EtFOSA	ng/mL	4.41	2.08	212	70	130	QQQ46759.d
SK40019	S4K2543-CCVC	d9-N-EtFOSE	ng/mL	27.3	20.8	131	70	130	QQQ46759.d
SK40019	S4K2543-CCVD	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.22	2.42	133	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M3PFBS	ng/mL	2.66	1.94	137	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M5PFHxA	ng/mL	2.91	2.08	140	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M4PFHpA	ng/mL	2.88	2.08	139	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M3PFHxS	ng/mL	2.96	1.98	150	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M6PFDA	ng/mL	1.47	1.04	142	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M7PFUdA	ng/mL	1.55	1.04	149	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.61	1.04	155	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M2PFTeDA	ng/mL	2.76	1.04	266	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.6	8.35	139	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.56	4.16	134	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	d3-N-MeFOSAA	ng/mL	5.75	4.16	138	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	d5-N-EtFOSAA	ng/mL	5.64	4.16	136	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M2-6:2 FTS	ng/mL	9.70	3.96	245	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M2-8:2 FTS	ng/mL	8.06	4.00	201	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M9PFNA	ng/mL	1.51	1.04	145	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M2-4:2 FTS	ng/mL	8.30	3.91	212	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	d-N-MeFOSA	ng/mL	3.81	2.08	183	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	d-N-EtFOSA	ng/mL	4.06	2.08	195	70	130	QQQ46771.d
SK40019	S4K2543-CCVD	M3HFPO-DA	ng/mL	12.7	8.35	153	70	130	QQQ46771.d
SK40019	S4K2543-CCVE	Perfluorotridecanoic acid (PFTTrDA)	ng/mL	1.71	2.50	68.4	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M5PFHxA	ng/mL	2.92	2.08	140	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M3PFHxS	ng/mL	2.61	1.98	132	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.76	2.08	133	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M6PFDA	ng/mL	1.51	1.04	145	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M7PFUdA	ng/mL	1.53	1.04	148	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.89	1.04	182	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M2PFTeDA	ng/mL	2.85	1.04	274	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	12.1	8.35	145	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.54	4.16	133	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	d3-N-MeFOSAA	ng/mL	5.44	4.16	131	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	d5-N-EtFOSAA	ng/mL	5.53	4.16	133	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M2-6:2 FTS	ng/mL	8.85	3.96	224	70	130	QQQ46780.d

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SK40019	S4K2543-CCVE	M2-8:2 FTS	ng/mL	7.14	4.00	179	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M9PFNA	ng/mL	1.36	1.04	131	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M2-4:2 FTS	ng/mL	7.35	3.91	188	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	d-N-MeFOSA	ng/mL	3.72	2.08	179	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	d-N-EtFOSA	ng/mL	4.14	2.08	199	70	130	QQQ46780.d
SK40019	S4K2543-CCVE	M3HFPO-DA	ng/mL	13.4	8.35	161	70	130	QQQ46780.d
SK40019	S4K2543-CCVF	Perfluoroheptanoic acid (PFHpA)	ng/mL	3.65	2.50	146	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/mL	2.87	5.00	57.5	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	11CL-PF3OUdS	ng/mL	12.4	9.45	131	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M5PFHxA	ng/mL	3.04	2.08	146	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M3PFHxS	ng/mL	2.61	1.98	132	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	3.05	2.08	147	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M6PFDA	ng/mL	1.43	1.04	138	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M7PFUdA	ng/mL	1.59	1.04	153	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	2.12	1.04	204	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M2PFTeDA	ng/mL	3.46	1.04	333	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.9	8.35	143	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	3.23	2.00	162	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	6.35	4.16	153	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.79	2.08	134	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M2-6:2 FTS	ng/mL	12.8	3.96	324	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M2-8:2 FTS	ng/mL	9.98	4.00	250	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M2-4:2 FTS	ng/mL	7.60	3.91	194	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	d-N-MeFOSA	ng/mL	4.20	2.08	202	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	d-N-EtFOSA	ng/mL	4.96	2.08	238	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	M3HFPO-DA	ng/mL	11.9	8.35	142	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	d9-N-EtFOSE	ng/mL	28.1	20.8	135	70	130	QQQ46802.d
SK40019	S4K2543-CCVF	d7-N-MeFOSE	ng/mL	28.8	20.8	139	70	130	QQQ46802.d
SK40019	S4K2543-CCVG	Perfluoroheptanoic acid (PFHpA)	ng/mL	3.56	2.50	143	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M3PFBS	ng/mL	2.60	1.94	134	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M5PFHxA	ng/mL	2.73	2.08	131	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M3PFHxS	ng/mL	2.60	1.98	131	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	3.03	2.08	146	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M7PFUdA	ng/mL	1.60	1.04	154	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.70	1.04	164	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M2PFTeDA	ng/mL	2.57	1.04	247	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.8	8.35	142	70	130	QQQ46806.d

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SK40019	S4K2543-CCVG	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	3.00	2.00	150	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.82	4.16	140	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.89	2.08	139	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M2-6:2 FTS	ng/mL	13.9	3.96	351	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M2-8:2 FTS	ng/mL	10.5	4.00	263	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M2-4:2 FTS	ng/mL	8.64	3.91	221	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	d-N-MeFOSA	ng/mL	3.98	2.08	191	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	d-N-EtFOSA	ng/mL	4.92	2.08	237	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	M3HFPO-DA	ng/mL	13.1	8.35	157	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	d9-N-EtFOSE	ng/mL	29.4	20.8	141	70	130	QQQ46806.d
SK40019	S4K2543-CCVG	d7-N-MeFOSE	ng/mL	27.7	20.8	133	70	130	QQQ46806.d
SK40019	S4K2902-CCV1	M5PFHxA	ng/mL	2.82	2.08	136	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M3PFHxS	ng/mL	2.69	1.98	136	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	3.10	2.08	149	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M6PFDA	ng/mL	1.39	1.04	134	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M7PFUDa	ng/mL	1.40	1.04	134	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.63	1.04	157	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M2PFTeDA	ng/mL	2.48	1.04	238	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	13.3	8.35	159	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.69	2.00	134	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.63	4.16	135	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.74	2.08	132	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d3-N-MeFOSAA	ng/mL	5.72	4.16	138	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d5-N-EtFOSAA	ng/mL	5.48	4.16	132	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M2-6:2 FTS	ng/mL	7.95	3.96	201	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M2-8:2 FTS	ng/mL	6.02	4.00	150	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M2-4:2 FTS	ng/mL	6.91	3.91	177	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d-N-MeFOSA	ng/mL	3.95	2.08	190	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d-N-EtFOSA	ng/mL	4.06	2.08	195	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	M3HFPO-DA	ng/mL	12.9	8.35	155	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d9-N-EtFOSE	ng/mL	31.0	20.8	149	70	130	QQQ46923.d
SK40019	S4K2902-CCV1	d7-N-MeFOSE	ng/mL	31.1	20.8	150	70	130	QQQ46923.d
SK40019	S4K2902-CCV2	M5PFHxA	ng/mL	2.82	2.08	136	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M3PFHxS	ng/mL	2.68	1.98	135	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.82	2.08	136	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M7PFUDa	ng/mL	1.48	1.04	143	70	130	QQQ46939.d

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SK40019	S4K2902-CCV2	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.69	1.04	163	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M2PFTeDA	ng/mL	2.05	1.04	197	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	13.1	8.35	157	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	Perfluoro-n- [13C5]pentanoic acid (M5PFPeA)	ng/mL	5.74	4.16	138	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d3-N-MeFOSAA	ng/mL	6.20	4.16	149	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d5-N-EtFOSAA	ng/mL	5.92	4.16	142	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M2-6:2 FTS	ng/mL	7.42	3.96	187	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M2-8:2 FTS	ng/mL	8.06	4.00	202	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M2-4:2 FTS	ng/mL	6.45	3.91	165	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d-N-MeFOSA	ng/mL	3.48	2.08	167	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d-N-EtFOSA	ng/mL	3.63	2.08	174	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	M3HFPO-DA	ng/mL	12.3	8.35	148	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d9-N-EtFOSE	ng/mL	28.8	20.8	138	70	130	QQQ46939.d
SK40019	S4K2902-CCV2	d7-N-MeFOSE	ng/mL	28.2	20.8	136	70	130	QQQ46939.d
SK40019	S4K2902-CCV3	M3PFBS	ng/mL	2.54	1.94	131	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M5PFHxA	ng/mL	2.85	2.08	137	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M4PFHpA	ng/mL	2.81	2.08	135	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M3PFHxS	ng/mL	2.65	1.98	134	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M6PFDA	ng/mL	1.37	1.04	132	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M7PFUDa	ng/mL	1.45	1.04	139	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.66	1.04	160	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M2PFTeDA	ng/mL	1.91	1.04	184	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	12.9	8.35	154	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.72	2.00	136	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	Perfluoro-n- [13C5]pentanoic acid (M5PFPeA)	ng/mL	5.76	4.16	138	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	ng/mL	2.83	2.08	136	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d3-N-MeFOSAA	ng/mL	6.00	4.16	144	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d5-N-EtFOSAA	ng/mL	6.40	4.16	154	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M2-6:2 FTS	ng/mL	7.33	3.96	185	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M2-8:2 FTS	ng/mL	5.89	4.00	147	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M2-4:2 FTS	ng/mL	6.61	3.91	169	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d-N-MeFOSA	ng/mL	3.97	2.08	191	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d-N-EtFOSA	ng/mL	3.77	2.08	181	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	M3HFPO-DA	ng/mL	12.9	8.35	154	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d9-N-EtFOSE	ng/mL	30.5	20.8	147	70	130	QQQ46953.d
SK40019	S4K2902-CCV3	d7-N-MeFOSE	ng/mL	32.3	20.8	155	70	130	QQQ46953.d
SK40019	S4L0238-CCV1	M3PFBS	ng/mL	2.64	1.94	136	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M5PFHxA	ng/mL	2.82	2.08	135	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M4PFHpA	ng/mL	2.87	2.08	138	70	130	QQQ46960.d

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SK40019	S4L0238-CCV1	M3PFHxS	ng/mL	2.96	1.98	149	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.91	2.08	140	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.58	1.04	152	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M2PFTeDA	ng/mL	1.58	1.04	152	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	10.9	8.35	131	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.63	4.16	135	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	d3-N-MeFOSAA	ng/mL	5.75	4.16	138	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	d5-N-EtFOSAA	ng/mL	5.75	4.16	138	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M2-8:2 FTS	ng/mL	7.04	4.00	176	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M9PFNA	ng/mL	1.41	1.04	135	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M2-4:2 FTS	ng/mL	2.12	3.91	54.2	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	M3HFPO-DA	ng/mL	13.8	8.35	166	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	d9-N-EtFOSE	ng/mL	27.4	20.8	132	70	130	QQQ46960.d
SK40019	S4L0238-CCV1	d7-N-MeFOSE	ng/mL	32.2	20.8	155	70	130	QQQ46960.d
SK40019	S4L0238-CCV2	Perfluoro-3,6-dioxaheptanoic acid (NFDHA)	ng/mL	6.54	5.00	131	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M3PFBS	ng/mL	2.57	1.94	132	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M5PFHxA	ng/mL	2.87	2.08	138	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M4PFHpA	ng/mL	3.13	2.08	151	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M3PFHxS	ng/mL	2.80	1.98	142	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M7PFUDa	ng/mL	1.47	1.04	141	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.79	1.04	172	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M2PFTeDA	ng/mL	2.02	1.04	194	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.5	8.35	138	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	6.18	4.16	149	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d3-N-MeFOSAA	ng/mL	5.44	4.16	131	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d5-N-EtFOSAA	ng/mL	5.62	4.16	135	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M2-6:2 FTS	ng/mL	5.70	3.96	144	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M2-8:2 FTS	ng/mL	5.75	4.00	144	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M9PFNA	ng/mL	1.36	1.04	131	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d-N-MeFOSA	ng/mL	3.08	2.08	148	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d-N-EtFOSA	ng/mL	3.60	2.08	173	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	M3HFPO-DA	ng/mL	12.6	8.35	151	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d9-N-EtFOSE	ng/mL	33.1	20.8	159	70	130	QQQ47042.d
SK40019	S4L0238-CCV2	d7-N-MeFOSE	ng/mL	32.4	20.8	156	70	130	QQQ47042.d
SK40019	S4L0238-CCV3	M3PFBS	ng/mL	2.74	1.94	141	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M5PFHxA	ng/mL	3.07	2.08	148	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M3PFHxS	ng/mL	2.73	1.98	138	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.79	2.08	134	70	130	QQQ47056.d

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SK40019	S4L0238-CCV3	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.67	1.04	161	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M2PFTeDA	ng/mL	2.38	1.04	228	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	12.1	8.35	145	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.74	2.00	137	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	Perfluoro-n- [13C5]pentanoic acid (M5PFPeA)	ng/mL	6.05	4.16	146	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d3-N-MeFOSAA	ng/mL	5.84	4.16	140	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d5-N-EtFOSAA	ng/mL	6.29	4.16	151	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M2-6:2 FTS	ng/mL	7.70	3.96	194	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M2-8:2 FTS	ng/mL	6.50	4.00	162	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M9PFNA	ng/mL	1.42	1.04	136	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M2-4:2 FTS	ng/mL	6.78	3.91	173	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d-N-MeFOSA	ng/mL	3.75	2.08	180	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d-N-EtFOSA	ng/mL	3.94	2.08	190	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	M3HFPO-DA	ng/mL	12.1	8.35	145	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d9-N-EtFOSE	ng/mL	29.0	20.8	139	70	130	QQQ47056.d
SK40019	S4L0238-CCV3	d7-N-MeFOSE	ng/mL	29.5	20.8	142	70	130	QQQ47056.d
SK40019	S4L0238-CCV4	M3PFBS	ng/mL	2.96	1.94	153	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M3PFHxS	ng/mL	3.06	1.98	154	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.88	2.08	139	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M7PFUdA	ng/mL	1.48	1.04	142	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	ng/mL	1.63	1.04	156	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M2PFTeDA	ng/mL	2.25	1.04	216	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	12.1	8.35	145	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.75	2.00	137	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-n- [13C5]pentanoic acid (M5PFPeA)	ng/mL	5.74	4.16	138	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	ng/mL	2.98	2.08	143	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d3-N-MeFOSAA	ng/mL	6.66	4.16	160	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d5-N-EtFOSAA	ng/mL	7.11	4.16	171	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M2-6:2 FTS	ng/mL	8.37	3.96	211	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M2-8:2 FTS	ng/mL	6.93	4.00	173	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M9PFNA	ng/mL	1.39	1.04	134	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M2-4:2 FTS	ng/mL	7.67	3.91	196	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d-N-MeFOSA	ng/mL	3.96	2.08	190	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d-N-EtFOSA	ng/mL	3.92	2.08	188	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	M3HFPO-DA	ng/mL	11.9	8.35	142	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d9-N-EtFOSE	ng/mL	32.0	20.8	154	70	130	QQQ47071.d
SK40019	S4L0238-CCV4	d7-N-MeFOSE	ng/mL	28.9	20.8	139	70	130	QQQ47071.d

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SK40019	S4L0238-CCV5	Perfluorododecanesulfonic acid (PFDoS)	ng/mL	3.22	2.42	133	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M5PFHxA	ng/mL	2.74	2.08	132	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M4PFHpA	ng/mL	3.01	2.08	145	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.86	2.08	138	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M7PFUdA	ng/mL	1.54	1.04	148	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.83	1.04	176	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M2PFTeDA	ng/mL	2.24	1.04	215	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.9	8.35	142	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.74	4.16	138	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	d3-N-MeFOSAA	ng/mL	6.03	4.16	145	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	d5-N-EtFOSAA	ng/mL	6.33	4.16	152	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M2-6:2 FTS	ng/mL	6.72	3.96	170	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M2-8:2 FTS	ng/mL	5.80	4.00	145	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M9PFNA	ng/mL	1.37	1.04	132	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M2-4:2 FTS	ng/mL	5.95	3.91	152	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	d-N-MeFOSA	ng/mL	3.78	2.08	182	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	d-N-EtFOSA	ng/mL	3.87	2.08	186	70	130	QQQ47085.d
SK40019	S4L0238-CCV5	M3HFPO-DA	ng/mL	11.5	8.35	137	70	130	QQQ47085.d
SK40019	S4L0238-CCV6	M3PFBS	ng/mL	2.57	1.94	132	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M5PFHxA	ng/mL	2.85	2.08	137	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	3.36	2.08	162	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M7PFUdA	ng/mL	1.54	1.04	148	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.88	1.04	181	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M2PFTeDA	ng/mL	2.33	1.04	224	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	12.1	8.35	145	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.68	2.00	134	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.70	4.16	137	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.75	2.08	132	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	d3-N-MeFOSAA	ng/mL	6.30	4.16	151	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	d5-N-EtFOSAA	ng/mL	6.15	4.16	148	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M2-6:2 FTS	ng/mL	7.37	3.96	186	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M2-8:2 FTS	ng/mL	6.51	4.00	163	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M2-4:2 FTS	ng/mL	6.34	3.91	162	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	d-N-MeFOSA	ng/mL	3.50	2.08	168	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	d-N-EtFOSA	ng/mL	4.05	2.08	195	70	130	QQQ47100.d
SK40019	S4L0238-CCV6	M3HFPO-DA	ng/mL	10.9	8.35	131	70	130	QQQ47100.d
SK40019	S4L0238-CCV7	M3PFBS	ng/mL	2.75	1.94	142	70	130	QQQ47112.d

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SK40019	S4L0238-CCV7	M5PFHxA	ng/mL	2.93	2.08	141	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M4PFHpA	ng/mL	2.86	2.08	138	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M3PFHxS	ng/mL	2.74	1.98	139	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	ng/mL	2.93	2.08	141	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M7PFUDa	ng/mL	1.41	1.04	136	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	ng/mL	1.59	1.04	153	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M2PFTeDA	ng/mL	2.28	1.04	220	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-n-[13C4]butanoic acid (MPFBA)	ng/mL	11.2	8.35	134	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	ng/mL	2.75	2.00	138	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	ng/mL	5.73	4.16	138	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	ng/mL	2.97	2.08	143	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d3-N-MeFOSAA	ng/mL	6.30	4.16	151	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d5-N-EtFOSAA	ng/mL	6.64	4.16	160	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M2-6:2 FTS	ng/mL	8.01	3.96	202	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M2-8:2 FTS	ng/mL	6.58	4.00	164	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M2-4:2 FTS	ng/mL	6.92	3.91	177	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d-N-MeFOSA	ng/mL	3.84	2.08	185	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d-N-EtFOSA	ng/mL	3.99	2.08	192	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	M3HFPO-DA	ng/mL	11.4	8.35	137	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d9-N-EtFOSE	ng/mL	28.2	20.8	136	70	130	QQQ47112.d
SK40019	S4L0238-CCV7	d7-N-MeFOSE	ng/mL	27.6	20.8	133	70	130	QQQ47112.d

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
SK40019	S4K1306	S4K1306-SCV1	Secondary Cal Check		QQQ46077.d
SK40019	S4K1306	S4K1306-CCB1	Calibration Blank		QQQ46083.d
SK40019	S4K2543	S4K2543-CCB1	Calibration Blank		QQQ46606.d
SK40019	S4K2543	S4K2543-CCB2	Calibration Blank		QQQ46623.d
SK40019	S4K2543	S4K2543-CCB3	Calibration Blank		QQQ46634.d
SK40019	S4K2543	S4K2543-CCB4	Calibration Blank		QQQ46649.d
SK40019	S4K2543	S4K2543-CCB5	Calibration Blank		QQQ46662.d
SK40019	S4K2543	S4K2543-CCB6	Calibration Blank		QQQ46678.d
SK40019	S4K2543	S4K2543-CCB7	Calibration Blank		QQQ46691.d
SK40019	S4K2543	S4K2543-CCB8	Calibration Blank		QQQ46707.d
SK40019	S4K2543	S4K2543-CCB9	Calibration Blank		QQQ46719.d
SK40019	S4K2543	S4K2543-CCBA	Calibration Blank		QQQ46735.d
SK40019	S4K2543	S4K2543-CCBB	Calibration Blank		QQQ46747.d
SK40019	S4K2543	BK41691-BLK1	Blank		QQQ46752.d
SK40019	S4K2543	BK41691-BS1	LCS		QQQ46753.d
SK40019	S4K2543	BK41691-BS2	LCS		QQQ46754.d
SK40019	S4K2543	S4K2543-CCBC	Calibration Blank		QQQ46760.d
SK40019	S4K2543	S4K2543-CCBD	Calibration Blank		QQQ46772.d
SK40019	S4K2543	S4K2543-CCBE	Calibration Blank		QQQ46781.d

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SK40019	S4K2543	S4K2543-CCBF	Calibration Blank	QQQ46803.d
SK40019	S4K2543	24K1488-02	VHB-MW-02	QQQ46804.d
SK40019	S4K2543	S4K2543-CCBG	Calibration Blank	QQQ46807.d
SK40019	S4K2902	S4K2902-CCB1	Calibration Blank	QQQ46925.d
SK40019	S4K2902	BK41817-BLK1	Blank	QQQ46926.d
SK40019	S4K2902	BK41817-BS1	LCS	QQQ46927.d
SK40019	S4K2902	BK41817-BS2	LCS	QQQ46928.d
SK40019	S4K2902	S4K2902-CCB2	Calibration Blank	QQQ46940.d
SK40019	S4K2902	S4K2902-CCB3	Calibration Blank	QQQ46954.d
SK40019	S4L0238	S4L0238-CCB1	Calibration Blank	QQQ46962.d
SK40019	S4L0238	S4L0238-CCB2	Calibration Blank	QQQ47043.d
SK40019	S4L0238	S4L0238-CCB3	Calibration Blank	QQQ47057.d
SK40019	S4L0238	S4L0238-CCB4	Calibration Blank	QQQ47072.d
SK40019	S4L0238	S4L0238-CCB5	Calibration Blank	QQQ47086.d
SK40019	S4L0238	S4L0238-CCB6	Calibration Blank	QQQ47101.d
SK40019	S4L0238	S4L0238-CCB7	Calibration Blank	QQQ47113.d

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Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
PFAS	BK41691	S4K2543	LCQQQ	BK41691-BLK1	QQQ46752.d
PFAS	BK41817	S4K2902	LCQQQ	BK41817-BLK1	QQQ46926.d

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SK40019	4K2543	BK41691-BS1	LCS	QQQ46753.d
SK40019	4K2543	BK41691-BS2	LCS	QQQ46754.d
SK40019	4K2902	BK41817-BS1	LCS	QQQ46927.d
SK40019	4K2902	BK41817-BS2	LCS	QQQ46928.d

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4K2543	LCS	BK41691-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		20.2		50 - 150	
S4K2543	LCS	BK41691-BS2	Perfluoro-4-oxapentanoic acid (PFMPA)		21.5		50 - 150	
S4K2902	LCS	BK41817-BS1	Perfluoro-4-oxapentanoic acid (PFMPA)		46.3		50 - 150	
S4K2902	LCS	BK41817-BS2	Perfluoro-4-oxapentanoic acid (PFMPA)		32.8		50 - 150	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
BK41817	24K1488-01	VHB-MW-01	
BK41691	24K1488-02	VHB-MW-02	
BK41817	24K1488-03	MW-1R	
BK41817	24K1488-04	MW-3	
BK41817	24K1488-05	MW-6	
BK41817	24K1488-06	DUP	
BK41691	BK41691-BLK1	Blank	
BK41817	BK41817-BLK1	Blank	

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Dilutions:

SpecificMethod	Batch	SampleName	LabNumber	Dilution
EPA 1633 Draft 3	BK41691	VHB-MW-02	24K1488-02	5
EPA 1633 Draft 3	BK41817	MW-3	24K1488-04RE1	10

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Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

Surrogate Issues:

Calibration	SampleName	LabNumber	Analyte	Rec %	Limits
SK40019	Blank	BK41691-BLK1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	158	25 - 150
SK40019	Blank	BK41691-BLK1	M2PFTeDA	176	10 - 150
SK40019	Blank	BK41691-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.06	25 - 150
SK40019	Blank	BK41691-BLK1	M2-6:2 FTS	232	25 - 200
SK40019	Blank	BK41691-BLK1	M2-4:2 FTS	214	25 - 150
SK40019	Blank	BK41691-BLK1	d-N-MeFOSA	152	25 - 150
SK40019	Blank	BK41691-BLK1	M3HFPO-DA	156	25 - 150
SK40019	LCS	BK41691-BS1	M2PFTeDA	173	10 - 150
SK40019	LCS	BK41691-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.43	25 - 150
SK40019	LCS	BK41691-BS1	M2-6:2 FTS	227	25 - 200
SK40019	LCS	BK41691-BS1	M2-4:2 FTS	183	25 - 150
SK40019	LCS	BK41691-BS1	d-N-MeFOSA	159	25 - 150
SK40019	LCS	BK41691-BS1	d-N-EtFOSA	161	25 - 150
SK40019	LCS	BK41691-BS2	M2PFTeDA	161	10 - 150
SK40019	LCS	BK41691-BS2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	5.19	25 - 150
SK40019	LCS	BK41691-BS2	M2-6:2 FTS	208	25 - 200
SK40019	LCS	BK41691-BS2	M2-4:2 FTS	185	25 - 150
SK40019	VHB-MW-02	24K1488-02	M2-6:2 FTS	302	25 - 200
SK40019	VHB-MW-02	24K1488-02	M2-4:2 FTS	245	25 - 150
SK40019	VHB-MW-02	24K1488-02	M3HFPO-DA	157	25 - 150
SK40019	Blank	BK41817-BLK1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	158	25 - 150
SK40019	Blank	BK41817-BLK1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.6	25 - 150
SK40019	Blank	BK41817-BLK1	M2-4:2 FTS	167	25 - 150
SK40019	LCS	BK41817-BS1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	22	25 - 150
SK40019	LCS	BK41817-BS1	M2-4:2 FTS	164	25 - 150
SK40019	LCS	BK41817-BS2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	14.3	25 - 150
SK40019	LCS	BK41817-BS2	M2-4:2 FTS	154	25 - 150
SK40019	VHB-MW-01	24K1488-01	M5PFHxA	154	25 - 150
SK40019	VHB-MW-01	24K1488-01	M4PFHpA	153	25 - 150
SK40019	VHB-MW-01	24K1488-01	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	160	25 - 150
SK40019	VHB-MW-01	24K1488-01	M2-6:2 FTS	219	25 - 200
SK40019	VHB-MW-01	24K1488-01	M2-4:2 FTS	179	25 - 150
SK40019	VHB-MW-01	24K1488-01	M3HFPO-DA	173	25 - 150
SK40019	MW-1R	24K1488-03	M3HFPO-DA	156	25 - 150

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SK40019	MW-3	24K1488-04	M3PFBS	167	25 - 150
SK40019	MW-3	24K1488-04	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	158	25 - 150
SK40019	MW-3	24K1488-04	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	160	10 - 150
SK40019	MW-3	24K1488-04	d3-N-MeFOSAA	156	25 - 150
SK40019	MW-3	24K1488-04	M2-6:2 FTS	292	25 - 200
SK40019	MW-3	24K1488-04	M2-8:2 FTS	227	25 - 200
SK40019	MW-3	24K1488-04	M2-4:2 FTS	238	25 - 150
SK40019	MW-3	24K1488-04	M3HFPO-DA	151	25 - 150
SK40019	MW-6	24K1488-05	M2-6:2 FTS	211	25 - 200
SK40019	MW-6	24K1488-05	M2-4:2 FTS	164	25 - 150
SK40019	DUP	24K1488-06	M5PFHxA	164	25 - 150
SK40019	DUP	24K1488-06	M4PFHpA	155	25 - 150
SK40019	DUP	24K1488-06	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	164	25 - 150
SK40019	DUP	24K1488-06	M2-6:2 FTS	258	25 - 200
SK40019	DUP	24K1488-06	M2-4:2 FTS	190	25 - 150
SK40019	DUP	24K1488-06	M3HFPO-DA	169	25 - 150
SK40019	Calibration Check	S4K1306-CCV1	M2PFTeDA	132	70 - 130
SK40019	Calibration Check	S4K1306-CCV1	d-N-EtFOSA	135	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	155	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	M2PFTeDA	168	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	M2-6:2 FTS	216	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	M2-8:2 FTS	181	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	M2-4:2 FTS	179	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	d-N-MeFOSA	151	70 - 130
SK40019	Calibration Check	S4K2543-CCV1	d-N-EtFOSA	170	70 - 130
SK40019	Calibration Blank	S4K2543-CCB1	M2PFTeDA	172	10 - 150
SK40019	Calibration Blank	S4K2543-CCB1	M2-4:2 FTS	174	25 - 150
SK40019	Calibration Blank	S4K2543-CCB1	d-N-EtFOSA	170	25 - 150
SK40019	Calibration Check	S4K2543-CCV2	M7PFUDa	133	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	146	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	M2PFTeDA	197	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	M2-6:2 FTS	170	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	M2-8:2 FTS	168	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	M2-4:2 FTS	167	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	d-N-MeFOSA	167	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	d-N-EtFOSA	188	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	d9-N-EtFOSE	135	70 - 130
SK40019	Calibration Check	S4K2543-CCV2	d7-N-MeFOSE	131	70 - 130
SK40019	Calibration Blank	S4K2543-CCB2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	161	25 - 150
SK40019	Calibration Blank	S4K2543-CCB2	M2PFTeDA	228	10 - 150

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SK40019	Calibration Blank	S4K2543-CCB2	M2-4:2 FTS	173	25 - 150
SK40019	Calibration Blank	S4K2543-CCB2	d-N-EtFOSA	195	25 - 150
SK40019	Calibration Check	S4K2543-CCV3	M7PFUdA	133	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	158	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	M2PFTeDA	224	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	M2-6:2 FTS	190	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	M2-8:2 FTS	177	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	M2-4:2 FTS	169	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	d-N-MeFOSA	173	70 - 130
SK40019	Calibration Check	S4K2543-CCV3	d-N-EtFOSA	173	70 - 130
SK40019	Calibration Blank	S4K2543-CCB3	M2PFTeDA	215	10 - 150
SK40019	Calibration Blank	S4K2543-CCB3	M2-6:2 FTS	215	25 - 200
SK40019	Calibration Blank	S4K2543-CCB3	M2-4:2 FTS	206	25 - 150
SK40019	Calibration Blank	S4K2543-CCB3	d-N-MeFOSA	177	25 - 150
SK40019	Calibration Blank	S4K2543-CCB3	d-N-EtFOSA	211	25 - 150
SK40019	Calibration Check	S4K2543-CCV4	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	147	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	M2PFTeDA	220	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	M2-6:2 FTS	186	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	M2-8:2 FTS	181	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	M2-4:2 FTS	164	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	d-N-MeFOSA	165	70 - 130
SK40019	Calibration Check	S4K2543-CCV4	d-N-EtFOSA	196	70 - 130
SK40019	Calibration Blank	S4K2543-CCB4	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	175	25 - 150
SK40019	Calibration Blank	S4K2543-CCB4	M2PFTeDA	247	10 - 150
SK40019	Calibration Blank	S4K2543-CCB4	M2-4:2 FTS	191	25 - 150
SK40019	Calibration Blank	S4K2543-CCB4	d-N-MeFOSA	172	25 - 150
SK40019	Calibration Blank	S4K2543-CCB4	d-N-EtFOSA	205	25 - 150
SK40019	Calibration Check	S4K2543-CCV5	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	154	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	M2PFTeDA	232	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	M2-6:2 FTS	199	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	M2-8:2 FTS	186	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	M2-4:2 FTS	172	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	d-N-MeFOSA	174	70 - 130
SK40019	Calibration Check	S4K2543-CCV5	d-N-EtFOSA	210	70 - 130
SK40019	Calibration Blank	S4K2543-CCB5	M2PFTeDA	215	10 - 150
SK40019	Calibration Blank	S4K2543-CCB5	M2-4:2 FTS	175	25 - 150
SK40019	Calibration Blank	S4K2543-CCB5	d-N-MeFOSA	171	25 - 150
SK40019	Calibration Blank	S4K2543-CCB5	d-N-EtFOSA	190	25 - 150
SK40019	Calibration Check	S4K2543-CCV6	M4PFHpA	132	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	M7PFUdA	139	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	163	70 - 130

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SK40019	Calibration Check	S4K2543-CCV6	M2PFTeDA	215	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	M2-6:2 FTS	197	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	M2-8:2 FTS	183	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	M2-4:2 FTS	177	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	d-N-MeFOSA	168	70 - 130
SK40019	Calibration Check	S4K2543-CCV6	d-N-EtFOSA	196	70 - 130
SK40019	Calibration Blank	S4K2543-CCB6	M7PFUDa	163	25 - 150
SK40019	Calibration Blank	S4K2543-CCB6	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	192	25 - 150
SK40019	Calibration Blank	S4K2543-CCB6	M2PFTeDA	287	10 - 150
SK40019	Calibration Blank	S4K2543-CCB6	M2-6:2 FTS	203	25 - 200
SK40019	Calibration Blank	S4K2543-CCB6	M2-4:2 FTS	191	25 - 150
SK40019	Calibration Blank	S4K2543-CCB6	d-N-MeFOSA	197	25 - 150
SK40019	Calibration Blank	S4K2543-CCB6	d-N-EtFOSA	211	25 - 150
SK40019	Calibration Check	S4K2543-CCV7	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	139	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	M2PFTeDA	208	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	d3-N-MeFOSAA	144	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	d5-N-EtFOSAA	144	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	M2-6:2 FTS	189	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	M2-8:2 FTS	179	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	M2-4:2 FTS	164	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	d-N-MeFOSA	179	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	d-N-EtFOSA	209	70 - 130
SK40019	Calibration Check	S4K2543-CCV7	M3HFPO-DA	134	70 - 130
SK40019	Calibration Blank	S4K2543-CCB7	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	164	25 - 150
SK40019	Calibration Blank	S4K2543-CCB7	M2PFTeDA	212	10 - 150
SK40019	Calibration Blank	S4K2543-CCB7	M2-6:2 FTS	234	25 - 200
SK40019	Calibration Blank	S4K2543-CCB7	M2-4:2 FTS	224	25 - 150
SK40019	Calibration Blank	S4K2543-CCB7	d-N-MeFOSA	197	25 - 150
SK40019	Calibration Blank	S4K2543-CCB7	d-N-EtFOSA	241	25 - 150
SK40019	Calibration Check	S4K2543-CCV8	M2PFTeDA	205	70 - 130
SK40019	Calibration Check	S4K2543-CCV8	M2-6:2 FTS	196	70 - 130
SK40019	Calibration Check	S4K2543-CCV8	M2-8:2 FTS	193	70 - 130
SK40019	Calibration Check	S4K2543-CCV8	M2-4:2 FTS	167	70 - 130
SK40019	Calibration Check	S4K2543-CCV8	d-N-MeFOSA	160	70 - 130
SK40019	Calibration Check	S4K2543-CCV8	d-N-EtFOSA	178	70 - 130
SK40019	Calibration Blank	S4K2543-CCB8	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	158	25 - 150
SK40019	Calibration Blank	S4K2543-CCB8	M2PFTeDA	241	10 - 150
SK40019	Calibration Blank	S4K2543-CCB8	M2-6:2 FTS	220	25 - 200
SK40019	Calibration Blank	S4K2543-CCB8	M2-4:2 FTS	200	25 - 150
SK40019	Calibration Blank	S4K2543-CCB8	d-N-MeFOSA	194	25 - 150

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SK40019	Calibration Blank	S4K2543-CCB8	d-N-EtFOSA	219	25 - 150
SK40019	Calibration Check	S4K2543-CCV9	M7PFUdA	134	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	184	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	M2PFTeDA	246	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	M2-6:2 FTS	187	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	M2-8:2 FTS	193	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	M2-4:2 FTS	172	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	d-N-MeFOSA	158	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	d-N-EtFOSA	187	70 - 130
SK40019	Calibration Check	S4K2543-CCV9	M3HFPO-DA	131	70 - 130
SK40019	Calibration Blank	S4K2543-CCB9	M2PFTeDA	242	10 - 150
SK40019	Calibration Blank	S4K2543-CCB9	M2-6:2 FTS	212	25 - 200
SK40019	Calibration Blank	S4K2543-CCB9	M2-4:2 FTS	204	25 - 150
SK40019	Calibration Blank	S4K2543-CCB9	d-N-MeFOSA	173	25 - 150
SK40019	Calibration Blank	S4K2543-CCB9	d-N-EtFOSA	204	25 - 150
SK40019	Calibration Check	S4K2543-CCVA	M2PFTeDA	202	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	Perfluoro-n-[13C4]butanoic acid (MPFBA)	132	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	141	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	136	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	d3-N-MeFOSAA	157	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	d5-N-EtFOSAA	168	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	M2-6:2 FTS	237	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	M2-8:2 FTS	199	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	M2-4:2 FTS	166	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	d-N-MeFOSA	156	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	d-N-EtFOSA	151	70 - 130
SK40019	Calibration Check	S4K2543-CCVA	M3HFPO-DA	132	70 - 130
SK40019	Calibration Blank	S4K2543-CCBA	M2PFTeDA	202	10 - 150
SK40019	Calibration Blank	S4K2543-CCBA	M2-6:2 FTS	203	25 - 200
SK40019	Calibration Blank	S4K2543-CCBA	M2-4:2 FTS	193	25 - 150
SK40019	Calibration Blank	S4K2543-CCBA	d-N-EtFOSA	171	25 - 150
SK40019	Calibration Check	S4K2543-CCVB	M3PFBS	141	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M5PFHxA	141	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M4PFHpA	138	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M3PFHxS	146	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	132	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M6PFDA	140	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M7PFUdA	154	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	192	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M2PFTeDA	257	70 - 130

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SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-n-[13C4]butanoic acid (MPFBA)	135	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	d3-N-MeFOSAA	143	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	d5-N-EtFOSAA	145	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M2-6:2 FTS	233	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M2-8:2 FTS	183	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M2-4:2 FTS	208	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	d-N-MeFOSA	192	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	d-N-EtFOSA	224	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	M3HFPO-DA	167	70 - 130
SK40019	Calibration Check	S4K2543-CCVB	d9-N-EtFOSE	132	70 - 130
SK40019	Calibration Blank	S4K2543-CCBB	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	178	25 - 150
SK40019	Calibration Blank	S4K2543-CCBB	M2PFTeDA	256	10 - 150
SK40019	Calibration Blank	S4K2543-CCBB	M2-6:2 FTS	229	25 - 200
SK40019	Calibration Blank	S4K2543-CCBB	M2-4:2 FTS	211	25 - 150
SK40019	Calibration Blank	S4K2543-CCBB	d-N-MeFOSA	181	25 - 150
SK40019	Calibration Blank	S4K2543-CCBB	d-N-EtFOSA	194	25 - 150
SK40019	Calibration Check	S4K2543-CCVC	M5PFHxA	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M4PFHpA	138	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M3PFHxS	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M6PFDA	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M7PFUDa	163	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	176	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M2PFTeDA	296	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	Perfluoro-n-[13C4]butanoic acid (MPFBA)	143	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	d3-N-MeFOSAA	141	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	d5-N-EtFOSAA	136	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M2-6:2 FTS	225	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M2-8:2 FTS	182	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	M2-4:2 FTS	194	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	d-N-MeFOSA	179	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	d-N-EtFOSA	212	70 - 130
SK40019	Calibration Check	S4K2543-CCVC	d9-N-EtFOSE	131	70 - 130

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SK40019	Calibration Blank	S4K2543-CCBC	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	161	25 - 150
SK40019	Calibration Blank	S4K2543-CCBC	M2PFTeDA	250	10 - 150
SK40019	Calibration Blank	S4K2543-CCBC	M2-6:2 FTS	215	25 - 200
SK40019	Calibration Blank	S4K2543-CCBC	M2-4:2 FTS	196	25 - 150
SK40019	Calibration Blank	S4K2543-CCBC	d-N-MeFOSA	197	25 - 150
SK40019	Calibration Blank	S4K2543-CCBC	d-N-EtFOSA	204	25 - 150
SK40019	Calibration Check	S4K2543-CCVD	M3PFBS	137	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M5PFHxA	140	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M4PFHpA	139	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M3PFHxS	150	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M6PFDA	142	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M7PFUDa	149	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	155	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M2PFTeDA	266	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	Perfluoro-n-[13C4]butanoic acid (MPFBA)	139	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	d3-N-MeFOSAA	138	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	d5-N-EtFOSAA	136	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M2-6:2 FTS	245	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M2-8:2 FTS	201	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M9PFNA	145	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M2-4:2 FTS	212	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	d-N-MeFOSA	183	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	d-N-EtFOSA	195	70 - 130
SK40019	Calibration Check	S4K2543-CCVD	M3HFPO-DA	153	70 - 130
SK40019	Calibration Blank	S4K2543-CCBD	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	169	25 - 150
SK40019	Calibration Blank	S4K2543-CCBD	M2PFTeDA	230	10 - 150
SK40019	Calibration Blank	S4K2543-CCBD	M2-6:2 FTS	221	25 - 200
SK40019	Calibration Blank	S4K2543-CCBD	M2-4:2 FTS	200	25 - 150
SK40019	Calibration Blank	S4K2543-CCBD	d-N-MeFOSA	192	25 - 150
SK40019	Calibration Blank	S4K2543-CCBD	d-N-EtFOSA	208	25 - 150
SK40019	Calibration Check	S4K2543-CCVE	M5PFHxA	140	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M3PFHxS	132	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M6PFDA	145	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M7PFUDa	148	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	182	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M2PFTeDA	274	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	Perfluoro-n-[13C4]butanoic acid (MPFBA)	145	70 - 130

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SK40019	Calibration Check	S4K2543-CCVE	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	d3-N-MeFOSAA	131	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	d5-N-EtFOSAA	133	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M2-6:2 FTS	224	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M2-8:2 FTS	179	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M9PFNA	131	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M2-4:2 FTS	188	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	d-N-MeFOSA	179	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	d-N-EtFOSA	199	70 - 130
SK40019	Calibration Check	S4K2543-CCVE	M3HFPO-DA	161	70 - 130
SK40019	Calibration Blank	S4K2543-CCBE	M2PFTeDA	234	10 - 150
SK40019	Calibration Blank	S4K2543-CCBE	M2-6:2 FTS	215	25 - 200
SK40019	Calibration Blank	S4K2543-CCBE	M2-4:2 FTS	193	25 - 150
SK40019	Calibration Blank	S4K2543-CCBE	d-N-MeFOSA	179	25 - 150
SK40019	Calibration Blank	S4K2543-CCBE	d-N-EtFOSA	199	25 - 150
SK40019	Calibration Check	S4K2543-CCVF	M5PFHxA	146	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M3PFHxS	132	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	147	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M6PFDA	138	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M7PFUDa	153	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	204	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M2PFTeDA	333	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-n-[13C4]butanoic acid (MPFBA)	143	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	162	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	153	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M2-6:2 FTS	324	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M2-8:2 FTS	250	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M2-4:2 FTS	194	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	d-N-MeFOSA	202	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	d-N-EtFOSA	238	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	M3HFPO-DA	142	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	d9-N-EtFOSE	135	70 - 130
SK40019	Calibration Check	S4K2543-CCVF	d7-N-MeFOSE	139	70 - 130
SK40019	Calibration Blank	S4K2543-CCBF	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	167	25 - 150
SK40019	Calibration Blank	S4K2543-CCBF	M2PFTeDA	247	10 - 150
SK40019	Calibration Blank	S4K2543-CCBF	M2-6:2 FTS	274	25 - 200
SK40019	Calibration Blank	S4K2543-CCBF	M2-4:2 FTS	218	25 - 150
SK40019	Calibration Blank	S4K2543-CCBF	d-N-MeFOSA	187	25 - 150

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SK40019	Calibration Blank	S4K2543-CCBF	d-N-EtFOSA	213	25 - 150
SK40019	Calibration Check	S4K2543-CCVG	M3PFBS	134	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M5PFHxA	131	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M3PFHxS	131	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	146	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M7PFUDa	154	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	164	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M2PFTeDA	247	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-n-[13C4]butanoic acid (MPFBA)	142	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	150	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	140	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	139	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M2-6:2 FTS	351	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M2-8:2 FTS	263	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M2-4:2 FTS	221	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	d-N-MeFOSA	191	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	d-N-EtFOSA	237	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	M3HFPO-DA	157	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	d9-N-EtFOSE	141	70 - 130
SK40019	Calibration Check	S4K2543-CCVG	d7-N-MeFOSE	133	70 - 130
SK40019	Calibration Blank	S4K2543-CCBG	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	169	25 - 150
SK40019	Calibration Blank	S4K2543-CCBG	M2PFTeDA	235	10 - 150
SK40019	Calibration Blank	S4K2543-CCBG	M2-6:2 FTS	202	25 - 200
SK40019	Calibration Blank	S4K2543-CCBG	M2-4:2 FTS	186	25 - 150
SK40019	Calibration Blank	S4K2543-CCBG	d-N-MeFOSA	184	25 - 150
SK40019	Calibration Blank	S4K2543-CCBG	d-N-EtFOSA	206	25 - 150
SK40019	Calibration Check	S4K2902-CCV1	M5PFHxA	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M3PFHxS	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	149	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M6PFDA	134	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M7PFUDa	134	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	157	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M2PFTeDA	238	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	159	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	134	70 - 130

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SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	135	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	132	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d3-N-MeFOSAA	138	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d5-N-EtFOSAA	132	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M2-6:2 FTS	201	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M2-8:2 FTS	150	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M2-4:2 FTS	177	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d-N-MeFOSA	190	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d-N-EtFOSA	195	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	M3HFPO-DA	155	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d9-N-EtFOSE	149	70 - 130
SK40019	Calibration Check	S4K2902-CCV1	d7-N-MeFOSE	150	70 - 130
SK40019	Calibration Blank	S4K2902-CCB1	M7PFUdA	155	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	172	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	M2PFTeDA	193	10 - 150
SK40019	Calibration Blank	S4K2902-CCB1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	151	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	M2-6:2 FTS	208	25 - 200
SK40019	Calibration Blank	S4K2902-CCB1	M2-4:2 FTS	187	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	d-N-MeFOSA	168	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	d-N-EtFOSA	183	25 - 150
SK40019	Calibration Blank	S4K2902-CCB1	M3HFPO-DA	153	25 - 150
SK40019	Calibration Check	S4K2902-CCV2	M5PFHxA	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M3PFHxS	135	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M7PFUdA	143	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	163	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M2PFTeDA	197	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	157	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	138	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d3-N-MeFOSAA	149	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d5-N-EtFOSAA	142	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M2-6:2 FTS	187	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M2-8:2 FTS	202	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M2-4:2 FTS	165	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d-N-MeFOSA	167	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d-N-EtFOSA	174	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	M3HFPO-DA	148	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d9-N-EtFOSE	138	70 - 130
SK40019	Calibration Check	S4K2902-CCV2	d7-N-MeFOSE	136	70 - 130

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SK40019	Calibration Blank	S4K2902-CCB2	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	169	25 - 150
SK40019	Calibration Blank	S4K2902-CCB2	M2PFTeDA	170	10 - 150
SK40019	Calibration Blank	S4K2902-CCB2	M2-4:2 FTS	170	25 - 150
SK40019	Calibration Blank	S4K2902-CCB2	d-N-MeFOSA	171	25 - 150
SK40019	Calibration Blank	S4K2902-CCB2	d-N-EtFOSA	182	25 - 150
SK40019	Calibration Blank	S4K2902-CCB2	M3HFPO-DA	163	25 - 150
SK40019	Calibration Check	S4K2902-CCV3	M3PFBS	131	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M5PFHxA	137	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M4PFHpA	135	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M3PFHxS	134	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M6PFDA	132	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M7PFUDa	139	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	160	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M2PFTeDA	184	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	Perfluoro-n-[13C4]butanoic acid (MPFBA)	154	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	Perfluoro-1- [13C8]octanesulfonic acid (M8PFOS)	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	138	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	Perfluoro-1- [13C8]octanesulfonamide (M8FOSA)	136	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d3-N-MeFOSAA	144	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d5-N-EtFOSAA	154	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M2-6:2 FTS	185	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M2-8:2 FTS	147	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M2-4:2 FTS	169	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d-N-MeFOSA	191	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d-N-EtFOSA	181	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	M3HFPO-DA	154	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d9-N-EtFOSE	147	70 - 130
SK40019	Calibration Check	S4K2902-CCV3	d7-N-MeFOSE	155	70 - 130
SK40019	Calibration Blank	S4K2902-CCB3	M2PFTeDA	181	10 - 150
SK40019	Calibration Blank	S4K2902-CCB3	M2-4:2 FTS	187	25 - 150
SK40019	Calibration Blank	S4K2902-CCB3	d-N-MeFOSA	161	25 - 150
SK40019	Calibration Blank	S4K2902-CCB3	d-N-EtFOSA	169	25 - 150
SK40019	Calibration Blank	S4K2902-CCB3	d7-N-MeFOSE	154	25 - 150
SK40019	Calibration Check	S4L0238-CCV1	M3PFBS	136	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M5PFHxA	135	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M4PFHpA	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M3PFHxS	149	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	140	70 - 130

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SK40019	Calibration Check	S4L0238-CCV1	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	152	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M2PFTeDA	152	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	Perfluoro-n-[13C4]butanoic acid (MPFBA)	131	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	135	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	d3-N-MeFOSAA	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	d5-N-EtFOSAA	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M2-8:2 FTS	176	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M9PFNA	135	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M2-4:2 FTS	54.2	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	M3HFPO-DA	166	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	d9-N-EtFOSE	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV1	d7-N-MeFOSE	155	70 - 130
SK40019	Calibration Blank	S4L0238-CCB1	M2PFTeDA	153	10 - 150
SK40019	Calibration Blank	S4L0238-CCB1	d9-N-EtFOSE	157	25 - 150
SK40019	Calibration Blank	S4L0238-CCB1	d7-N-MeFOSE	170	25 - 150
SK40019	Calibration Check	S4L0238-CCV2	M3PFBS	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M5PFHxA	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M4PFHpA	151	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M3PFHxS	142	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M7PFUDa	141	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	172	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M2PFTeDA	194	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	Perfluoro-n-[13C4]butanoic acid (MPFBA)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	149	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d3-N-MeFOSAA	131	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d5-N-EtFOSAA	135	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M2-6:2 FTS	144	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M2-8:2 FTS	144	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M9PFNA	131	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d-N-MeFOSA	148	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d-N-EtFOSA	173	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	M3HFPO-DA	151	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d9-N-EtFOSE	159	70 - 130
SK40019	Calibration Check	S4L0238-CCV2	d7-N-MeFOSE	156	70 - 130
SK40019	Calibration Blank	S4L0238-CCB2	M7PFUDa	153	25 - 150
SK40019	Calibration Blank	S4L0238-CCB2	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	167	25 - 150
SK40019	Calibration Blank	S4L0238-CCB2	M2PFTeDA	203	10 - 150
SK40019	Calibration Blank	S4L0238-CCB2	d-N-MeFOSA	153	25 - 150
SK40019	Calibration Blank	S4L0238-CCB2	d-N-EtFOSA	167	25 - 150
SK40019	Calibration Blank	S4L0238-CCB2	d9-N-EtFOSE	154	25 - 150
SK40019	Calibration Blank	S4L0238-CCB2	d7-N-MeFOSE	158	25 - 150

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SK40019	Calibration Check	S4L0238-CCV3	M3PFBS	141	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M5PFHxA	148	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M3PFHxS	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	134	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	161	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M2PFTeDA	228	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	Perfluoro-n-[13C4]butanoic acid (MPFBA)	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	137	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	146	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d3-N-MeFOSAA	140	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d5-N-EtFOSAA	151	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M2-6:2 FTS	194	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M2-8:2 FTS	162	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M9PFNA	136	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M2-4:2 FTS	173	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d-N-MeFOSA	180	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d-N-EtFOSA	190	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	M3HFPO-DA	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d9-N-EtFOSE	139	70 - 130
SK40019	Calibration Check	S4L0238-CCV3	d7-N-MeFOSE	142	70 - 130
SK40019	Calibration Blank	S4L0238-CCB3	M2PFTeDA	224	10 - 150
SK40019	Calibration Blank	S4L0238-CCB3	M2-4:2 FTS	178	25 - 150
SK40019	Calibration Blank	S4L0238-CCB3	d-N-EtFOSA	173	25 - 150
SK40019	Calibration Check	S4L0238-CCV4	M3PFBS	153	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M3PFHxS	154	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	139	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M7PFUdA	142	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	156	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M2PFTeDA	216	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-n-[13C4]butanoic acid (MPFBA)	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	137	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	143	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d3-N-MeFOSAA	160	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d5-N-EtFOSAA	171	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M2-6:2 FTS	211	70 - 130

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SK40019	Calibration Check	S4L0238-CCV4	M2-8:2 FTS	173	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M9PFNA	134	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M2-4:2 FTS	196	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d-N-MeFOSA	190	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d-N-EtFOSA	188	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	M3HFPO-DA	142	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d9-N-EtFOSE	154	70 - 130
SK40019	Calibration Check	S4L0238-CCV4	d7-N-MeFOSE	139	70 - 130
SK40019	Calibration Blank	S4L0238-CCB4	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	173	25 - 150
SK40019	Calibration Blank	S4L0238-CCB4	M2PFTeDA	197	10 - 150
SK40019	Calibration Blank	S4L0238-CCB4	M2-6:2 FTS	202	25 - 200
SK40019	Calibration Blank	S4L0238-CCB4	M2-4:2 FTS	182	25 - 150
SK40019	Calibration Blank	S4L0238-CCB4	d-N-EtFOSA	164	25 - 150
SK40019	Calibration Check	S4L0238-CCV5	M5PFHxA	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M4PFHpA	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M7PFUDa	148	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	176	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M2PFTeDA	215	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	Perfluoro-n-[13C4]butanoic acid (MPFBA)	142	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	d3-N-MeFOSAA	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	d5-N-EtFOSAA	152	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M2-6:2 FTS	170	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M2-8:2 FTS	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M9PFNA	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M2-4:2 FTS	152	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	d-N-MeFOSA	182	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	d-N-EtFOSA	186	70 - 130
SK40019	Calibration Check	S4L0238-CCV5	M3HFPO-DA	137	70 - 130
SK40019	Calibration Blank	S4L0238-CCB5	M7PFUDa	155	25 - 150
SK40019	Calibration Blank	S4L0238-CCB5	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	156	25 - 150
SK40019	Calibration Blank	S4L0238-CCB5	M2PFTeDA	197	10 - 150
SK40019	Calibration Blank	S4L0238-CCB5	M2-4:2 FTS	171	25 - 150
SK40019	Calibration Blank	S4L0238-CCB5	d-N-MeFOSA	153	25 - 150
SK40019	Calibration Blank	S4L0238-CCB5	d-N-EtFOSA	164	25 - 150
SK40019	Calibration Check	S4L0238-CCV6	M3PFBS	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M5PFHxA	137	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-n-[13C8]octanoic acid (M8PFOA)	162	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M7PFUDa	148	70 - 130

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SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid (MPFDoA)	181	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M2PFTeDA	224	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-n-[¹³ C ₄]butanoic acid (MPFBA)	145	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-1-[¹³ C ₈]octanesulfonic acid (M8PFOS)	134	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-n-[¹³ C ₅]pentanoic acid (M5PFPeA)	137	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	Perfluoro-1-[¹³ C ₈]octanesulfonamide (M8FOSA)	132	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	d3-N-MeFOSAA	151	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	d5-N-EtFOSAA	148	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M2-6:2 FTS	186	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M2-8:2 FTS	163	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M2-4:2 FTS	162	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	d-N-MeFOSA	168	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	d-N-EtFOSA	195	70 - 130
SK40019	Calibration Check	S4L0238-CCV6	M3HFPO-DA	131	70 - 130
SK40019	Calibration Blank	S4L0238-CCB6	Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid (MPFDoA)	175	25 - 150
SK40019	Calibration Blank	S4L0238-CCB6	M2PFTeDA	230	10 - 150
SK40019	Calibration Blank	S4L0238-CCB6	M2-4:2 FTS	182	25 - 150
SK40019	Calibration Blank	S4L0238-CCB6	d-N-MeFOSA	151	25 - 150
SK40019	Calibration Blank	S4L0238-CCB6	d-N-EtFOSA	166	25 - 150
SK40019	Calibration Check	S4L0238-CCV7	M3PFBS	142	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M5PFHxA	141	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M4PFHpA	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M3PFHxS	139	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-n-[¹³ C ₈]octanoic acid (M8PFOA)	141	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M7PFUdA	136	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-n-[1,2- ¹³ C ₂]dodecanoic acid (MPFDoA)	153	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M2PFTeDA	220	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-n-[¹³ C ₄]butanoic acid (MPFBA)	134	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-1-[¹³ C ₈]octanesulfonic acid (M8PFOS)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-n-[¹³ C ₅]pentanoic acid (M5PFPeA)	138	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	Perfluoro-1-[¹³ C ₈]octanesulfonamide (M8FOSA)	143	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d3-N-MeFOSAA	151	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d5-N-EtFOSAA	160	70 - 130

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SK40019	Calibration Check	S4L0238-CCV7	M2-6:2 FTS	202	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M2-8:2 FTS	164	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M2-4:2 FTS	177	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d-N-MeFOSA	185	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d-N-EtFOSA	192	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	M3HFPO-DA	137	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d9-N-EtFOSE	136	70 - 130
SK40019	Calibration Check	S4L0238-CCV7	d7-N-MeFOSE	133	70 - 130
SK40019	Calibration Blank	S4L0238-CCB7	Perfluoro-n-[1,2- 13C2]dodecanoic acid (MPFDoA)	159	25 - 150
SK40019	Calibration Blank	S4L0238-CCB7	M2PFTeDA	210	10 - 150
SK40019	Calibration Blank	S4L0238-CCB7	M2-4:2 FTS	172	25 - 150
SK40019	Calibration Blank	S4L0238-CCB7	d-N-MeFOSA	157	25 - 150
SK40019	Calibration Blank	S4L0238-CCB7	d-N-EtFOSA	170	25 - 150

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4.0 Analysis Issues

CT DEP ETPH

Extractable Total Petroleum Hydrocarbons (ETPH)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : SA40030

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
SA40030	S4A1907	S4A1907	Secondary Cal Check	S4A1907-SCV1	HP FID 3	G8009735.D
SA40030	S4K2529	S4K2529	Calibration Check	S4K2529-CCV1	HP FID 3	G8013256.D
SA40030	BK41608	S4K2529	Blank	BK41608-BLK1	HP FID 3	G8013257.D
SA40030	BK41608	S4K2529	LCS	BK41608-BS1	HP FID 3	G8013258.D
SA40030	BK41608	S4K2529	LCS Dup	BK41608-BSD1	HP FID 3	G8013259.D
SA40030	BK41608	S4K2529	VHB-MW-01	24K1488-01	HP FID 3	G8013262.D
SA40030	BK41608	S4K2529	MW-1R	24K1488-03	HP FID 3	G8013263.D
SA40030	BK41608	S4K2529	MW-3	24K1488-04	HP FID 3	G8013264.D
SA40030	BK41608	S4K2529	MW-6	24K1488-05	HP FID 3	G8013265.D
SA40030	BK41608	S4K2529	DUP	24K1488-06	HP FID 3	G8013266.D
SA40030	S4K2529	S4K2529	Calibration Check	S4K2529-CCV2	HP FID 3	G8013269.D
SA40030	S4K2529	S4K2529	Calibration Check	S4K2529-CCV3	HP FID 3	G8013277.D

Initial calibration for CT DEP ETPH exceeded method guidelines.

Calibration	Intrument	Calibration Date	File ID
SA40030	HP FID 3	1/18/2024 7:03:11 AM	G8009725.D

Analyte	RSD%	RSDLim	<MinRRE	RRFLim	CorrCoeff	CCOut	SIM	CAL curve
ETPH (Extractable Total Petroleum Hydrocarbons)		15			0.93872	out		LR0

The following QC and or client samples were affected:

SampleName	LabNumber	SourceSample	File ID
Secondary Cal Check	S4A1907-SCV1		G8009735.D
Calibration Check	S4K2529-CCV1		G8013256.D
Blank	BK41608-BLK1		G8013257.D
LCS	BK41608-BS1		G8013258.D
LCS Dup	BK41608-BSD1		G8013259.D
VHB-MW-01	24K1488-01		G8013262.D
MW-1R	24K1488-03		G8013263.D
MW-3	24K1488-04		G8013264.D
MW-6	24K1488-05		G8013265.D
DUP	24K1488-06		G8013266.D
Calibration Check	S4K2529-CCV2		G8013269.D
Calibration Check	S4K2529-CCV3		G8013277.D

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CT DEP ETPH

Initial Calibration Verification-

The initial calibration verification for analytical method CT DEP ETPH

All target analytes recovered within method limits

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
SA40030	S4K2529	S4K2529-CCV1	G8013256.D	11/24/24 08:55
SA40030	S4K2529	S4K2529-CCV2	G8013269.D	11/24/24 21:34
SA40030	S4K2529	S4K2529-CCV3	G8013277.D	11/25/24 02:39

The continuing calibration verification recovered within method limits.

CT DEP ETPH

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

	Batch	Sequence	Instrument	Blank	FileID
GC	BK41608	S4K2529	HP FID 3	BK41608-BLK1	G8013257.D

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
SA40030	4K2529	BK41608-BS1	LCS	G8013258.D
SA40030	4K2529	BK41608-BSD1	LCS Dup	G8013259.D

CT DEP ETPH

Dilutions: No sample dilutions were required.

CT DEP ETPH

Internal Standards / Surrogates

Surrogate Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 6020B

Metals, CTDEP RCP, ICP/MS (Full List)

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : **Metals, CTDEP RCP, ICP/MS (Full List)**

Samples and QC analyzed using this calibration / sequence.

Calibration	Batch	Sequence	SampleName	LabNumber	Instrument	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Initial Cal Check	S4K2504-ICV1	Nexion2000C	QBIMX112224B-023
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Initial Cal Blank	S4K2504-ICB1	Nexion2000C	QBIMX112224B-024
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Check	S4K2504-CCV1	Nexion2000C	QBIMX112224B-025
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Blank	S4K2504-CCB1	Nexion2000C	QBIMX112224B-026
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Instrument RL Check	S4K2504-CRL1	Nexion2000C	QBIMX112224B-028
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Interference Check A	S4K2504-IFA1	Nexion2000C	QBIMX112224B-029
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Interference Check B	S4K2504-IFB1	Nexion2000C	QBIMX112224B-030
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Check	S4K2504-CCV2	Nexion2000C	QBIMX112224B-031
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Blank	S4K2504-CCB2	Nexion2000C	QBIMX112224B-032
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Check	S4K2504-CCV3	Nexion2000C	QBIMX112224B-043
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Blank	S4K2504-CCB3	Nexion2000C	QBIMX112224B-044
Metals, CTDEP RCP, ICP/MS (Full List)	BK41554	S4K2504	Blank	BK41554-BLK1	Nexion2000C	QBIMX112224B-053
Metals, CTDEP RCP, ICP/MS (Full List)	BK41554	S4K2504	LCS	BK41554-BS1	Nexion2000C	QBIMX112224B-054
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Check	S4K2504-CCV4	Nexion2000C	QBIMX112224B-055
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Blank	S4K2504-CCB4	Nexion2000C	QBIMX112224B-056
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Check	S4K2504-CCV5	Nexion2000C	QBIMX112224B-067
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504	S4K2504	Calibration Blank	S4K2504-CCB5	Nexion2000C	QBIMX112224B-068
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Initial Cal Check	S4K2545-ICV1	Nexion2000C	QBIMX112524A-011
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Initial Cal Blank	S4K2545-ICB1	Nexion2000C	QBIMX112524A-012
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Check	S4K2545-CCV1	Nexion2000C	QBIMX112524A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Blank	S4K2545-CCB1	Nexion2000C	QBIMX112524A-017
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Instrument RL Check	S4K2545-CRL1	Nexion2000C	QBIMX112524A-018

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4.0 Analysis Issues

Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Interference Check A	S4K2545-IFA1	Nexion2000C	QBIMX112524A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Interference Check B	S4K2545-IFB1	Nexion2000C	QBIMX112524A-024
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Check	S4K2545-CCV2	Nexion2000C	QBIMX112524A-027
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Blank	S4K2545-CCB2	Nexion2000C	QBIMX112524A-028
Metals, CTDEP RCP, ICP/MS (Full List)	BK41663	S4K2545	Blank	BK41663-BLK1	Nexion2000C	QBIMX112524A-035
Metals, CTDEP RCP, ICP/MS (Full List)	BK41663	S4K2545	LCS	BK41663-BS1	Nexion2000C	QBIMX112524A-036
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Check	S4K2545-CCV3	Nexion2000C	QBIMX112524A-039
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Blank	S4K2545-CCB3	Nexion2000C	QBIMX112524A-040
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Check	S4K2545-CCV4	Nexion2000C	QBIMX112524A-046
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545	S4K2545	Calibration Blank	S4K2545-CCB4	Nexion2000C	QBIMX112524A-047
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Initial Cal Check	S4K2631-ICV1	Nexion2000C	QBIMX112624A-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Initial Cal Blank	S4K2631-ICB1	Nexion2000C	QBIMX112624A-009
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Check	S4K2631-CCV1	Nexion2000C	QBIMX112624A-010
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Blank	S4K2631-CCB1	Nexion2000C	QBIMX112624A-011
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Instrument RL Check	S4K2631-CRL1	Nexion2000C	QBIMX112624A-015
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Interference Check A	S4K2631-IFA1	Nexion2000C	QBIMX112624A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Interference Check B	S4K2631-IFB1	Nexion2000C	QBIMX112624A-018
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Check	S4K2631-CCV2	Nexion2000C	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Blank	S4K2631-CCB2	Nexion2000C	QBIMX112624A-022
Metals, CTDEP RCP, ICP/MS (Full List)	BK41663	S4K2631	MW-3	24K1488-04	Nexion2000C	QBIMX112624A-023
Metals, CTDEP RCP, ICP/MS (Full List)	BK41663	S4K2631	MW-6	24K1488-05	Nexion2000C	QBIMX112624A-024
Metals, CTDEP RCP, ICP/MS (Full List)	BK41663	S4K2631	DUP	24K1488-06	Nexion2000C	QBIMX112624A-025
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Check	S4K2631-CCV3	Nexion2000C	QBIMX112624A-033
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Blank	S4K2631-CCB3	Nexion2000C	QBIMX112624A-034
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Check	S4K2631-CCV4	Nexion2000C	QBIMX112624A-047
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Blank	S4K2631-CCB4	Nexion2000C	QBIMX112624A-048
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Check	S4K2631-CCV5	Nexion2000C	QBIMX112624A-059

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4.0 Analysis Issues

Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631	S4K2631	Calibration Blank	S4K2631-CCB5	Nexion2000C	QBIMX112624A-060
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Initial Cal Check	S4K2634-ICV1	Nexion2000C	QBIMX112624A-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Initial Cal Blank	S4K2634-ICB1	Nexion2000C	QBIMX112624A-009
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Check	S4K2634-CCV1	Nexion2000C	QBIMX112624A-010
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Blank	S4K2634-CCB1	Nexion2000C	QBIMX112624A-011
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Instrument RL Check	S4K2634-CRL1	Nexion2000C	QBIMX112624A-015
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Interference Check A	S4K2634-IFA1	Nexion2000C	QBIMX112624A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Interference Check B	S4K2634-IFB1	Nexion2000C	QBIMX112624A-018
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Check	S4K2634-CCV2	Nexion2000C	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Blank	S4K2634-CCB2	Nexion2000C	QBIMX112624A-022
Metals, CTDEP RCP, ICP/MS (Full List)	BK41554	S4K2634	VHB-MW-01	24K1488-01	Nexion2000C	QBIMX112624A-026
Metals, CTDEP RCP, ICP/MS (Full List)	BK41554	S4K2634	MW-1R	24K1488-03	Nexion2000C	QBIMX112624A-027
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Check	S4K2634-CCV3	Nexion2000C	QBIMX112624A-033
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634	S4K2634	Calibration Blank	S4K2634-CCB3	Nexion2000C	QBIMX112624A-034

Initial calibration for EPA 6020B met method guidelines.

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EPA 6020B

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 6020B

All target analytes recovered within method limits with the following exceptions:

Calibration ID	Lab Number	Analyte	True Value	Result	Recovery%	Limits
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-ICV1	Antimony	0.0500	0.044	87.4	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-ICV1	Antimony	0.0500	0.044	87.1	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-ICV1	Antimony	0.0500	0.044	88.1	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-ICV1	Antimony	0.0500	0.044	88.1	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-ICV1	Selenium	0.0500	0.038	76.8	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-ICV1	Silver	0.0500	0.043	86.8	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-ICV1	Silver	0.0500	0.043	86.7	90 - 110
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-ICV1	Silver	0.0500	0.043	86.7	90 - 110

The following QC and or client samples were affected:

LabNumber	SampleName	File ID
S4K2504-ICB1	Initial Cal Blank	QBIMX112224B-024
S4K2504-CCV1	Calibration Check	QBIMX112224B-025
S4K2504-CCB1	Calibration Blank	QBIMX112224B-026
S4K2504-IFA1	Interference Check A	QBIMX112224B-029
S4K2504-IFB1	Interference Check B	QBIMX112224B-030
S4K2504-CCV2	Calibration Check	QBIMX112224B-031
S4K2504-CCB2	Calibration Blank	QBIMX112224B-032
S4K2504-CCV3	Calibration Check	QBIMX112224B-043
S4K2504-CCB3	Calibration Blank	QBIMX112224B-044
BK41554-BLK1	Blank	QBIMX112224B-053
BK41554-BS1	LCS	QBIMX112224B-054
S4K2504-CCV4	Calibration Check	QBIMX112224B-055
S4K2504-CCB4	Calibration Blank	QBIMX112224B-056

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S4K2504-CCV5	Calibration Check	QBIMX112224B-067
S4K2504-CCB5	Calibration Blank	QBIMX112224B-068
S4K2545-ICB1	Initial Cal Blank	QBIMX112524A-012
S4K2545-CCV1	Calibration Check	QBIMX112524A-016
S4K2545-CCB1	Calibration Blank	QBIMX112524A-017
S4K2545-IFA1	Interference Check A	QBIMX112524A-021
S4K2545-IFB1	Interference Check B	QBIMX112524A-024
S4K2545-CCV2	Calibration Check	QBIMX112524A-027
S4K2545-CCB2	Calibration Blank	QBIMX112524A-028
BK41663-BLK1	Blank	QBIMX112524A-035
BK41663-BS1	LCS	QBIMX112524A-036
S4K2545-CCV3	Calibration Check	QBIMX112524A-039
S4K2545-CCB3	Calibration Blank	QBIMX112524A-040
S4K2545-CCV4	Calibration Check	QBIMX112524A-046
S4K2545-CCB4	Calibration Blank	QBIMX112524A-047
S4K2631-ICB1	Initial Cal Blank	QBIMX112624A-009
S4K2634-ICB1	Initial Cal Blank	QBIMX112624A-009
S4K2631-CCV1	Calibration Check	QBIMX112624A-010
S4K2634-CCV1	Calibration Check	QBIMX112624A-010
S4K2631-CCB1	Calibration Blank	QBIMX112624A-011
S4K2634-CCB1	Calibration Blank	QBIMX112624A-011
S4K2631-IFA1	Interference Check A	QBIMX112624A-016
S4K2634-IFA1	Interference Check A	QBIMX112624A-016
S4K2631-IFB1	Interference Check B	QBIMX112624A-018
S4K2634-IFB1	Interference Check B	QBIMX112624A-018
S4K2631-CCV2	Calibration Check	QBIMX112624A-021
S4K2634-CCV2	Calibration Check	QBIMX112624A-021
S4K2631-CCB2	Calibration Blank	QBIMX112624A-022
S4K2634-CCB2	Calibration Blank	QBIMX112624A-022
24K1488-04	MW-3	QBIMX112624A-023
24K1488-05	MW-6	QBIMX112624A-024
24K1488-06	DUP	QBIMX112624A-025
24K1488-01	VHB-MW-01	QBIMX112624A-026
24K1488-03	MW-1R	QBIMX112624A-027
S4K2631-CCV3	Calibration Check	QBIMX112624A-033
S4K2634-CCV3	Calibration Check	QBIMX112624A-033
S4K2631-CCB3	Calibration Blank	QBIMX112624A-034
S4K2634-CCB3	Calibration Blank	QBIMX112624A-034
S4K2631-CCV4	Calibration Check	QBIMX112624A-047
S4K2631-CCB4	Calibration Blank	QBIMX112624A-048
S4K2631-CCV5	Calibration Check	QBIMX112624A-059
S4K2631-CCB5	Calibration Blank	QBIMX112624A-060

Continuing Calibration Verification-

Calibration	Sequence	LabNumber	File ID	Date / Time
Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-CCV1	QBIMX112224B-025	11/22/24 16:59
Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-CCV2	QBIMX112224B-031	11/22/24 17:19
Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-CCV3	QBIMX112224B-043	11/22/24 18:01
Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-CCV4	QBIMX112224B-055	11/22/24 18:43
Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-CCV5	QBIMX112224B-067	11/22/24 19:25

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Metals, CTDEP RCP, ICP/MS (F	S4K2504	S4K2504-ICV1	QBIMX112224B-023	11/22/24 16:52
Metals, CTDEP RCP, ICP/MS (F	S4K2545	S4K2545-CCV1	QBIMX112524A-016	11/25/24 12:12
Metals, CTDEP RCP, ICP/MS (F	S4K2545	S4K2545-CCV2	QBIMX112524A-027	11/25/24 12:56
Metals, CTDEP RCP, ICP/MS (F	S4K2545	S4K2545-CCV3	QBIMX112524A-039	11/25/24 13:42
Metals, CTDEP RCP, ICP/MS (F	S4K2545	S4K2545-CCV4	QBIMX112524A-046	11/25/24 14:27
Metals, CTDEP RCP, ICP/MS (F	S4K2545	S4K2545-ICV1	QBIMX112524A-011	11/25/24 11:53
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-CCV1	QBIMX112624A-010	11/26/24 12:07
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-CCV2	QBIMX112624A-021	11/26/24 12:49
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-CCV3	QBIMX112624A-033	11/26/24 13:31
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-CCV4	QBIMX112624A-047	11/26/24 14:24
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-CCV5	QBIMX112624A-059	11/26/24 15:07
Metals, CTDEP RCP, ICP/MS (F	S4K2631	S4K2631-ICV1	QBIMX112624A-007	11/26/24 11:55
Metals, CTDEP RCP, ICP/MS (F	S4K2634	S4K2634-CCV1	QBIMX112624A-010	11/26/24 12:07
Metals, CTDEP RCP, ICP/MS (F	S4K2634	S4K2634-CCV2	QBIMX112624A-021	11/26/24 12:49
Metals, CTDEP RCP, ICP/MS (F	S4K2634	S4K2634-CCV3	QBIMX112624A-033	11/26/24 13:31
Metals, CTDEP RCP, ICP/MS (F	S4K2634	S4K2634-ICV1	QBIMX112624A-007	11/26/24 11:55

The continuing calibration verification exceeded method limits for the following analytes.

Calibration	LabNumber	Analyte	Units	Result	TrueVal	REC%	Limits	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV1	Antimony	ug/mL	0.041	0.050	82.5	90 110	QBIMX112224B-025
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV1	Cadmium	ug/mL	0.045	0.050	89.6	90 110	QBIMX112224B-025
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV2	Antimony	ug/mL	0.039	0.050	78.7	90 110	QBIMX112224B-031
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV2	Barium	ug/mL	0.043	0.050	85.3	90 110	QBIMX112224B-031
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV2	Cadmium	ug/mL	0.043	0.050	86.9	90 110	QBIMX112224B-031
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV3	Barium	ug/mL	0.061	0.050	123	90 110	QBIMX112224B-043
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV3	Selenium	ug/mL	0.059	0.050	118	90 110	QBIMX112224B-043

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Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV4	Antimony	ug/mL	0.042	0.050	83.4	90	110	QBIMX112224B-055
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV5	Antimony	ug/mL	0.028	0.050	56.6	90	110	QBIMX112224B-067
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV5	Barium	ug/mL	0.039	0.050	78.8	90	110	QBIMX112224B-067
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-CCV5	Cadmium	ug/mL	0.032	0.050	64.4	90	110	QBIMX112224B-067
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-ICV1	Antimony	ug/mL	0.044	0.050	87.4	90	110	QBIMX112224B-023
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2504-ICV1	Selenium	ug/mL	0.038	0.050	76.8	90	110	QBIMX112224B-023
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV1	Antimony	ug/mL	0.041	0.050	81.2	90	110	QBIMX112524A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV1	Barium	ug/mL	0.043	0.050	86.3	90	110	QBIMX112524A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV1	Cadmium	ug/mL	0.044	0.050	87.4	90	110	QBIMX112524A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV1	Selenium	ug/mL	0.039	0.050	78.7	90	110	QBIMX112524A-016
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV2	Antimony	ug/mL	0.041	0.050	82.4	90	110	QBIMX112524A-027

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Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV2	Barium	ug/mL	0.045	0.050	89.1	90	110	QBIMX112524A-027
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV2	Selenium	ug/mL	0.040	0.050	80.8	90	110	QBIMX112524A-027
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV3	Antimony	ug/mL	0.044	0.050	87.4	90	110	QBIMX112524A-039
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV3	Beryllium	ug/mL	0.039	0.050	78.4	90	110	QBIMX112524A-039
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV3	Copper	ug/mL	0.056	0.050	111	90	110	QBIMX112524A-039
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV3	Selenium	ug/mL	0.043	0.050	86.4	90	110	QBIMX112524A-039
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV4	Antimony	ug/mL	0.038	0.050	76.1	90	110	QBIMX112524A-046
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV4	Beryllium	ug/mL	0.040	0.050	80	90	110	QBIMX112524A-046
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-CCV4	Cadmium	ug/mL	0.040	0.050	81	90	110	QBIMX112524A-046
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-ICV1	Antimony	ug/mL	0.044	0.050	87.1	90	110	QBIMX112524A-011
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2545-ICV1	Silver	ug/mL	0.043	0.050	86.8	90	110	QBIMX112524A-011

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Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV1	Barium	ug/mL	0.045	0.050	89.1	90	110	QBIMX112624A-010
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV2	Antimony	ug/mL	0.041	0.050	82.6	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV2	Barium	ug/mL	0.040	0.050	81	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV2	Cadmium	ug/mL	0.041	0.050	83	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV3	Barium	ug/mL	0.045	0.050	89.3	90	110	QBIMX112624A-033
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV4	Beryllium	ug/mL	0.057	0.050	113	90	110	QBIMX112624A-047
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV5	Antimony	ug/mL	0.057	0.050	115	90	110	QBIMX112624A-059
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-CCV5	Cadmium	ug/mL	0.060	0.050	120	90	110	QBIMX112624A-059
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-ICV1	Antimony	ug/mL	0.044	0.050	88.1	90	110	QBIMX112624A-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2631-ICV1	Silver	ug/mL	0.043	0.050	86.7	90	110	QBIMX112624A-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-CCV1	Barium	ug/mL	0.045	0.050	89.1	90	110	QBIMX112624A-010

York Analytical Work Order Narrative

Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-CCV2	Antimony	ug/mL	0.041	0.050	82.6	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-CCV2	Barium	ug/mL	0.040	0.050	81	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-CCV2	Cadmium	ug/mL	0.041	0.050	83	90	110	QBIMX112624A-021
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-CCV3	Barium	ug/mL	0.045	0.050	89.3	90	110	QBIMX112624A-033
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-ICV1	Antimony	ug/mL	0.044	0.050	88.1	90	110	QBIMX112624A-007
Metals, CTDEP RCP, ICP/MS (Full List)	S4K2634-ICV1	Silver	ug/mL	0.043	0.050	86.7	90	110	QBIMX112624A-007

The following QC and or client samples were affected:

Calibration	Sequence	LabNumber	SampleName	Source Sample	File ID
Metals, CTDEP RC	S4K2504	S4K2504-ICB1	Initial Cal Blank		QBIMX112224B-024
Metals, CTDEP RC	S4K2504	S4K2504-CCB1	Calibration Blank		QBIMX112224B-026
Metals, CTDEP RC	S4K2504	S4K2504-IFA1	Interference Check A		QBIMX112224B-029
Metals, CTDEP RC	S4K2504	S4K2504-IFB1	Interference Check B		QBIMX112224B-030
Metals, CTDEP RC	S4K2504	S4K2504-CCB2	Calibration Blank		QBIMX112224B-032
Metals, CTDEP RC	S4K2504	S4K2504-CCB3	Calibration Blank		QBIMX112224B-044
Metals, CTDEP RC	S4K2504	BK41554-BLK1	Blank		QBIMX112224B-053
Metals, CTDEP RC	S4K2504	BK41554-BS1	LCS		QBIMX112224B-054
Metals, CTDEP RC	S4K2504	S4K2504-CCB4	Calibration Blank		QBIMX112224B-056
Metals, CTDEP RC	S4K2504	S4K2504-CCB5	Calibration Blank		QBIMX112224B-068
Metals, CTDEP RC	S4K2545	S4K2545-ICB1	Initial Cal Blank		QBIMX112524A-012
Metals, CTDEP RC	S4K2545	S4K2545-CCB1	Calibration Blank		QBIMX112524A-017
Metals, CTDEP RC	S4K2545	S4K2545-IFA1	Interference Check A		QBIMX112524A-021
Metals, CTDEP RC	S4K2545	S4K2545-IFB1	Interference Check B		QBIMX112524A-024
Metals, CTDEP RC	S4K2545	S4K2545-CCB2	Calibration Blank		QBIMX112524A-028
Metals, CTDEP RC	S4K2545	BK41663-BLK1	Blank		QBIMX112524A-035
Metals, CTDEP RC	S4K2545	BK41663-BS1	LCS		QBIMX112524A-036
Metals, CTDEP RC	S4K2545	S4K2545-CCB3	Calibration Blank		QBIMX112524A-040
Metals, CTDEP RC	S4K2545	S4K2545-CCB4	Calibration Blank		QBIMX112524A-047
Metals, CTDEP RC	S4K2631	S4K2631-ICB1	Initial Cal Blank		QBIMX112624A-009
Metals, CTDEP RC	S4K2634	S4K2634-ICB1	Initial Cal Blank		QBIMX112624A-009

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Metals, CTDEP RC	S4K2631	S4K2631-CCB1	Calibration Blank	QBIMX112624A-011
Metals, CTDEP RC	S4K2634	S4K2634-CCB1	Calibration Blank	QBIMX112624A-011
Metals, CTDEP RC	S4K2631	S4K2631-IFA1	Interference Check A	QBIMX112624A-016
Metals, CTDEP RC	S4K2634	S4K2634-IFA1	Interference Check A	QBIMX112624A-016
Metals, CTDEP RC	S4K2631	S4K2631-IFB1	Interference Check B	QBIMX112624A-018
Metals, CTDEP RC	S4K2634	S4K2634-IFB1	Interference Check B	QBIMX112624A-018
Metals, CTDEP RC	S4K2631	S4K2631-CCB2	Calibration Blank	QBIMX112624A-022
Metals, CTDEP RC	S4K2634	S4K2634-CCB2	Calibration Blank	QBIMX112624A-022
Metals, CTDEP RC	S4K2631	24K1488-04	MW-3	QBIMX112624A-023
Metals, CTDEP RC	S4K2631	24K1488-05	MW-6	QBIMX112624A-024
Metals, CTDEP RC	S4K2631	24K1488-06	DUP	QBIMX112624A-025
Metals, CTDEP RC	S4K2634	24K1488-01	VHB-MW-01	QBIMX112624A-026
Metals, CTDEP RC	S4K2634	24K1488-03	MW-1R	QBIMX112624A-027
Metals, CTDEP RC	S4K2631	S4K2631-CCB3	Calibration Blank	QBIMX112624A-034
Metals, CTDEP RC	S4K2634	S4K2634-CCB3	Calibration Blank	QBIMX112624A-034
Metals, CTDEP RC	S4K2631	S4K2631-CCB4	Calibration Blank	QBIMX112624A-048
Metals, CTDEP RC	S4K2631	S4K2631-CCB5	Calibration Blank	QBIMX112624A-060

York Analytical Work Order Narrative

EPA 6020B

Batch QC

Method Blank-

	Batch	Sequence	Instrument	Blank	FileID			
METALS	BK41554	S4K2504	Nexion2000C	BK41554-BLK1	QBIMX112224B-053			
METALS	BK41663	S4K2545	Nexion2000C	BK41663-BLK1	QBIMX112524A-035			
Sequence	SampleName	LabNumber	Matrix	Analyte	Result	MRL	RptUnits	
S4K2545	Blank	BK41663-BLK1	Water	Copper	0.00181	0.0011	mg/L	
S4K2504	Blank	BK41554-BLK1	Water	Selenium	0.00355	0.0011	mg/L	
S4K2545	Blank	BK41663-BLK1	Water	Zinc	0.00237	0.0011	mg/L	

The following QC and or client samples had positive(s) in associated blanks:

Batch	LabNumber	SampleName	File ID
BK41554	24K1488-01	VHB-MW-01	QBIMX112624A-026
BK41554	24K1488-03	MW-1R	QBIMX112624A-027
BK41663	24K1488-04	MW-3	QBIMX112624A-023
BK41663	24K1488-05	MW-6	QBIMX112624A-024
BK41663	24K1488-06	DUP	QBIMX112624A-025
BK41554	BK41554-BS1	LCS	QBIMX112224B-054
BK41663	BK41663-BS1	LCS	QBIMX112524A-036

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
Metals, CTDEP RCP, ICP/MS (Full List)	4K2504	BK41554-BS1	LCS	QBIMX112224B-054
Metals, CTDEP RCP, ICP/MS (Full List)	4K2545	BK41663-BS1	LCS	QBIMX112524A-036

Sequence	SampleName	LabNumber	Analyte	DupRec%	Rec%	RPD%	REC Limits	RPD Limit
S4K2504	LCS	BK41554-BS1	Zinc		129		80 - 120	

The following samples were affected:

Batch	LabNumber	SampleName	SourceSample
S4K2504	S4K2504-ICB1	Initial Cal Blank	
S4K2504	S4K2504-IFA1	Interference Check A	
S4K2504	S4K2504-IFB1	Interference Check B	

EPA 6020B

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

EPA 6020B

Internal Standards / Surrogates

Internal Standards Issues: No issues were encountered.

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4.0 Analysis Issues

EPA 7470

Mercury by 7470/7471

No problems were encountered with analysis of the samples, other than detailed below.

Initial Calibration : none

Samples and QC analyzed using this calibration / sequence.

Initial calibration for **EPA 7470** **met method guidelines.**

EPA 7470

Initial Calibration Verification-

The initial calibration verification for analytical method EPA 7470

All target analytes recovered within method limits

Continuing Calibration Verification-

The continuing calibration verification recovered within method limits.

EPA 7470

Batch QC

Method Blank- No reportable target compounds were detected in the method blank(s)

Laboratory Control Sample (LCS) or Standard Reference Material (SRM)-

Were run as batch QC for this project. Please refer to the Quality Control Data attached to this report for bias information.

Calibration	Sequence	LabNumber	SampleName	File ID
none		BK41680-BS1	LCS	QBHg11252024A-032
none		BK41680-BS2	LCS	QBHg11252024A-052

EPA 7470

Dilutions: No sample dilutions were required.

York Analytical Work Order Narrative

York Analytical Laboratories, Inc.

Formulae Used for Sample Calculations

1. Volatiles in Air-ppbv

C_x (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_x = \frac{(A_x)(Cis)(DF)}{(Ais)(RRF)}$$

2. Volatiles in Air-ug/m³

C_x (ug/m³)= Compound concentration in ug/m³

$$Cx \text{ (ug/m}^3\text{)} = \frac{\text{(ppbv x Molecular wt.)}}{(24.040)}$$

3. Volatile Organics (water and soil), ug/L or ug/kg

Soils/Waters	Medium Level Soils
1. Benzene 2. Toluene 3. Ethylbenzene 4. m,p-Xylenes 5. o-Xylene 6. Styrene 7. Propylbenzene 8. Isopropylbenzene 9. n-Propyltoluene 10. Isopropyltoluene 11. n-Butyltoluene 12. Isobutyltoluene 13. t-Butyltoluene 14. p-Toluenesulfonate 15. m-Toluenesulfonate 16. o-Toluenesulfonate 17. p-Toluenesulfonate 18. m-Toluenesulfonate 19. o-Toluenesulfonate 20. p-Toluenesulfonate 21. m-Toluenesulfonate 22. o-Toluenesulfonate 23. p-Toluenesulfonate 24. m-Toluenesulfonate 25. o-Toluenesulfonate 26. p-Toluenesulfonate 27. m-Toluenesulfonate 28. o-Toluenesulfonate 29. p-Toluenesulfonate 30. m-Toluenesulfonate 31. o-Toluenesulfonate 32. p-Toluenesulfonate 33. m-Toluenesulfonate 34. o-Toluenesulfonate 35. p-Toluenesulfonate 36. m-Toluenesulfonate 37. o-Toluenesulfonate 38. p-Toluenesulfonate 39. m-Toluenesulfonate 40. o-Toluenesulfonate 41. p-Toluenesulfonate 42. m-Toluenesulfonate 43. o-Toluenesulfonate 44. p-Toluenesulfonate 45. m-Toluenesulfonate 46. o-Toluenesulfonate 47. p-Toluenesulfonate 48. m-Toluenesulfonate 49. o-Toluenesulfonate 50. p-Toluenesulfonate 51. m-Toluenesulfonate 52. o-Toluenesulfonate 53. p-Toluenesulfonate 54. m-Toluenesulfonate 55. o-Toluenesulfonate 56. p-Toluenesulfonate 57. m-Toluenesulfonate 58. o-Toluenesulfonate 59. p-Toluenesulfonate 60. m-Toluenesulfonate 61. o-Toluenesulfonate 62. p-Toluenesulfonate 63. m-Toluenesulfonate 64. o-Toluenesulfonate 65. p-Toluenesulfonate 66. m-Toluenesulfonate 67. o-Toluenesulfonate 68. p-Toluenesulfonate 69. m-Toluenesulfonate 70. o-Toluenesulfonate 71. p-Toluenesulfonate 72. m-Toluenesulfonate 73. o-Toluenesulfonate 74. p-Toluenesulfonate 75. m-Toluenesulfonate 76. o-Toluenesulfonate 77. p-Toluenesulfonate 78. m-Toluenesulfonate 79. o-Toluenesulfonate 80. p-Toluenesulfonate 81. m-Toluenesulfonate 82. o-Toluenesulfonate 83. p-Toluenesulfonate 84. m-Toluenesulfonate 85. o-Toluenesulfonate 86. p-Toluenesulfonate 87. m-Toluenesulfonate 88. o-Toluenesulfonate 89. p-Toluenesulfonate 90. m-Toluenesulfonate 91. o-Toluenesulfonate 92. p-Toluenesulfonate 93. m-Toluenesulfonate 94. o-Toluenesulfonate 95. p-Toluenesulfonate 96. m-Toluenesulfonate 97. o-Toluenesulfonate 98. p-Toluenesulfonate 99. m-Toluenesulfonate 100. o-Toluenesulfonate	1. Benzene 2. Toluene 3. Ethylbenzene 4. m,p-Xylenes 5. o-Xylene 6. Styrene 7. Propylbenzene 8. Isopropylbenzene 9. n-Propyltoluene 10. Isopropyltoluene 11. n-Butyltoluene 12. Isobutyltoluene 13. t-Butyltoluene 14. p-Toluenesulfonate 15. m-Toluenesulfonate 16. o-Toluenesulfonate 17. p-Toluenesulfonate 18. m-Toluenesulfonate 19. o-Toluenesulfonate 20. p-Toluenesulfonate 21. m-Toluenesulfonate 22. o-Toluenesulfonate 23. p-Toluenesulfonate 24. m-Toluenesulfonate 25. o-Toluenesulfonate 26. p-Toluenesulfonate 27. m-Toluenesulfonate 28. o-Toluenesulfonate 29. p-Toluenesulfonate 30. m-Toluenesulfonate 31. o-Toluenesulfonate 32. p-Toluenesulfonate 33. m-Toluenesulfonate 34. o-Toluenesulfonate 35. p-Toluenesulfonate 36. m-Toluenesulfonate 37. o-Toluenesulfonate 38. p-Toluenesulfonate 39. m-Toluenesulfonate 40. o-Toluenesulfonate 41. p-Toluenesulfonate 42. m-Toluenesulfonate 43. o-Toluenesulfonate 44. p-Toluenesulfonate 45. m-Toluenesulfonate 46. o-Toluenesulfonate 47. p-Toluenesulfonate 48. m-Toluenesulfonate 49. o-Toluenesulfonate 50. p-Toluenesulfonate 51. m-Toluenesulfonate 52. o-Toluenesulfonate 53. p-Toluenesulfonate 54. m-Toluenesulfonate 55. o-Toluenesulfonate 56. p-Toluenesulfonate 57. m-Toluenesulfonate 58. o-Toluenesulfonate 59. p-Toluenesulfonate 60. m-Toluenesulfonate 61. o-Toluenesulfonate 62. p-Toluenesulfonate 63. m-Toluenesulfonate 64. o-Toluenesulfonate 65. p-Toluenesulfonate 66. m-Toluenesulfonate 67. o-Toluenesulfonate 68. p-Toluenesulfonate 69. m-Toluenesulfonate 70. o-Toluenesulfonate 71. p-Toluenesulfonate 72. m-Toluenesulfonate 73. o-Toluenesulfonate 74. p-Toluenesulfonate 75. m-Toluenesulfonate 76. o-Toluenesulfonate 77. p-Toluenesulfonate 78. m-Toluenesulfonate 79. o-Toluenesulfonate 80. p-Toluenesulfonate 81. m-Toluenesulfonate 82. o-Toluenesulfonate 83. p-Toluenesulfonate 84. m-Toluenesulfonate 85. o-Toluenesulfonate 86. p-Toluenesulfonate 87. m-Toluenesulfonate 88. o-Toluenesulfonate 89. p-Toluenesulfonate 90. m-Toluenesulfonate 91. o-Toluenesulfonate 92. p-Toluenesulfonate 93. m-Toluenesulfonate 94. o-Toluenesulfonate 95. p-Toluenesulfonate 96. m-Toluenesulfonate 97. o-Toluenesulfonate 98. p-Toluenesulfonate 99. m-Toluenesulfonate 100. o-Toluenesulfonate

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})} \quad C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

4. Semi-Volatiles (waters and soils)

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

5. Pesticides/PCB (waters and soils), DRO, CTETPH

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

C_x = concentration of analyte as ug/L or ug/kg

A_x = Area of the characteristic ion for the compound to be measured, counts.

Ais = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

VA = volume of MeOH aliquot for medium level soils

VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



Analytical Batch Summary

Batch ID: BK41554 **Preparation Method:** EPA 3015A **Prepared By:** DBT

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/22/24
24K1488-03	MW-1R	11/22/24
BK41554-BLK1	Blank	11/22/24
BK41554-BS1	LCS	11/22/24

Batch ID: BK41575 **Preparation Method:** EPA 5030B **Prepared By:** PMB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/22/24
24K1488-03	MW-1R	11/22/24
24K1488-04	MW-3	11/22/24
24K1488-06	DUP	11/22/24
BK41575-BLK1	Blank	11/22/24
BK41575-BS1	LCS	11/22/24
BK41575-BSD1	LCS Dup	11/22/24

Batch ID: BK41608 **Preparation Method:** EPA SW846-3510C Low Level **Prepared By:** DCB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/24/24
24K1488-03	MW-1R	11/24/24
24K1488-04	MW-3	11/24/24
24K1488-05	MW-6	11/24/24
24K1488-06	DUP	11/24/24
BK41608-BLK1	Blank	11/24/24
BK41608-BS1	LCS	11/24/24
BK41608-BSD1	LCS Dup	11/24/24

Batch ID: BK41621 **Preparation Method:** EPA 5030B **Prepared By:** SCB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-07	Trip Blank	11/23/24
BK41621-BLK1	Blank	11/23/24
BK41621-BS1	LCS	11/23/24

Batch ID: BK41663 **Preparation Method:** EPA 3015A **Prepared By:** DBT

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-04	MW-3	11/25/24
24K1488-05	MW-6	11/25/24
24K1488-06	DUP	11/25/24
BK41663-BLK1	Blank	11/25/24
BK41663-BS1	LCS	11/25/24



Batch ID: BK41675

Preparation Method: EPA 3510C

Prepared By: DCB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/25/24
24K1488-03	MW-1R	11/25/24
24K1488-04	MW-3	11/25/24
24K1488-05	MW-6	11/25/24
24K1488-06	DUP	11/25/24
BK41675-BLK2	Blank	11/25/24

Batch ID: BK41680

Preparation Method: EPA SW846-7470A

Prepared By: PFA

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/25/24
24K1488-03	MW-1R	11/25/24
24K1488-04	MW-3	11/25/24
24K1488-05	MW-6	11/25/24
24K1488-06	DUP	11/25/24
BK41680-BLK1	Blank	11/25/24
BK41680-BLK2	Blank	11/25/24
BK41680-BS1	LCS	11/25/24
BK41680-BS2	LCS	11/25/24

Batch ID: BK41691

Preparation Method: EPA 1633 Prep

Prepared By: SAB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-02	VHB-MW-02	11/25/24
BK41691-BLK1	Blank	11/25/24
BK41691-BS1	LCS	11/25/24
BK41691-BS2	LCS	11/25/24

Batch ID: BK41817

Preparation Method: EPA 1633 Prep

Prepared By: SAB

YORK Sample ID	Client Sample ID	Preparation Date
24K1488-01	VHB-MW-01	11/26/24
24K1488-03	MW-1R	11/26/24
24K1488-04	MW-3	11/26/24
24K1488-04RE1	MW-3	11/26/24
24K1488-05	MW-6	11/26/24
24K1488-06	DUP	11/26/24
BK41817-BLK1	Blank	11/26/24
BK41817-BS1	LCS	11/26/24
BK41817-BS2	LCS	11/26/24



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41575 - EPA 5030B

Blank (BK41575-BLK1)

Prepared & Analyzed: 11/22/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"
4-Chlorotoluene	ND	0.500	"
4-Methyl-2-pentanone	ND	0.500	"
Acetone	ND	2.00	"
Acrylonitrile	ND	0.500	"
Benzene	ND	0.500	"
Bromobenzene	ND	0.500	"
Bromochloromethane	ND	0.500	"
Bromodichloromethane	ND	0.500	"
Bromoform	ND	0.500	"
Bromomethane	ND	0.500	"
Carbon disulfide	ND	0.500	"
Carbon tetrachloride	ND	0.500	"
Chlorobenzene	ND	0.500	"
Chloroethane	ND	0.500	"
Chloroform	ND	0.500	"
Chloromethane	ND	0.500	"
cis-1,2-Dichloroethylene	ND	0.500	"
cis-1,3-Dichloropropylene	ND	0.500	"
Dibromochloromethane	ND	0.500	"
Dibromomethane	ND	0.500	"
Dichlorodifluoromethane	ND	0.500	"
Ethyl Benzene	ND	0.500	"
Hexachlorobutadiene	ND	0.500	"
Isopropylbenzene	ND	0.500	"
Methyl Methacrylate	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41575 - EPA 5030B

Blank (BK41575-BLK1)

Prepared & Analyzed: 11/22/2024

Methyl tert-butyl ether (MTBE)	ND	0.500	ug/L
Methylene chloride	ND	2.00	"
Naphthalene	ND	2.00	"
n-Butylbenzene	ND	0.500	"
n-Propylbenzene	ND	0.500	"
o-Xylene	ND	0.500	"
p- & m- Xylenes	ND	1.00	"
p-Isopropyltoluene	ND	0.500	"
sec-Butylbenzene	ND	0.500	"
Styrene	ND	0.500	"
tert-Butylbenzene	ND	0.500	"
Tetrachloroethylene	ND	0.500	"
Tetrahydrofuran	ND	4.00	"
Toluene	ND	0.500	"
trans-1,2-Dichloroethylene	ND	0.500	"
trans-1,3-Dichloropropylene	ND	0.500	"
trans-1,4-dichloro-2-butene	ND	0.500	"
Trichloroethylene	ND	0.500	"
Trichlorofluoromethane	ND	0.500	"
Vinyl Chloride	ND	0.500	"

Surrogate: SURR: 1,2-Dichloroethane-d4	9.04	"	10.0	90.4	70-130
Surrogate: SURR: Toluene-d8	9.84	"	10.0	98.4	70-130
Surrogate: SURR: p-Bromofluorobenzene	10.7	"	10.0	107	70-130

LCS (BK41575-BS1)

Prepared & Analyzed: 11/22/2024

1,1,1,2-Tetrachloroethane	9.37	ug/L	10.0	93.7	70-130
1,1,1-Trichloroethane	9.57	"	10.0	95.7	70-130
1,1,2,2-Tetrachloroethane	9.59	"	10.0	95.9	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.5	"	10.0	115	70-130
1,1,2-Trichloroethane	9.49	"	10.0	94.9	70-130
1,1-Dichloroethane	9.72	"	10.0	97.2	70-130
1,1-Dichloroethylene	11.3	"	10.0	113	70-130
1,1-Dichloropropylene	10.2	"	10.0	102	70-130
1,2,3-Trichlorobenzene	8.97	"	10.0	89.7	70-130
1,2,3-Trichloropropane	9.01	"	10.0	90.1	70-130
1,2,4-Trichlorobenzene	9.60	"	10.0	96.0	70-130
1,2,4-Trimethylbenzene	9.60	"	10.0	96.0	70-130
1,2-Dibromo-3-chloropropane	10.2	"	10.0	102	70-130
1,2-Dibromoethane	9.50	"	10.0	95.0	70-130
1,2-Dichlorobenzene	9.13	"	10.0	91.3	70-130
1,2-Dichloroethane	9.64	"	10.0	96.4	70-130
1,2-Dichloropropane	10.1	"	10.0	101	70-130
1,3,5-Trimethylbenzene	9.55	"	10.0	95.5	70-130
1,3-Dichlorobenzene	9.09	"	10.0	90.9	70-130
1,3-Dichloropropane	9.78	"	10.0	97.8	70-130
1,4-Dichlorobenzene	9.00	"	10.0	90.0	70-130
2,2-Dichloropropane	9.82	"	10.0	98.2	70-130
2-Butanone	9.40	"	10.0	94.0	70-130
2-Chlorotoluene	9.21	"	10.0	92.1	70-130
2-Hexanone	9.69	"	10.0	96.9	70-130
4-Chlorotoluene	9.30	"	10.0	93.0	70-130



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41575 - EPA 5030B

LCS (BK41575-BS1)

Prepared & Analyzed: 11/22/2024

4-Methyl-2-pentanone	10.4		ug/L	10.0		104	70-130				
Acetone	8.20		"	10.0		82.0	70-130				
Acrylonitrile	10.6		"	10.0		106	70-130				
Benzene	10.1		"	10.0		101	70-130				
Bromobenzene	9.57		"	10.0		95.7	70-130				
Bromochloromethane	9.93		"	10.0		99.3	70-130				
Bromodichloromethane	9.49		"	10.0		94.9	70-130				
Bromoform	9.72		"	10.0		97.2	70-130				
Bromomethane	10.8		"	10.0		108	70-130				
Carbon disulfide	11.2		"	10.0		112	70-130				
Carbon tetrachloride	9.95		"	10.0		99.5	70-130				
Chlorobenzene	9.53		"	10.0		95.3	70-130				
Chloroethane	9.65		"	10.0		96.5	70-130				
Chloroform	9.39		"	10.0		93.9	70-130				
Chloromethane	9.04		"	10.0		90.4	70-130				
cis-1,2-Dichloroethylene	9.99		"	10.0		99.9	70-130				
cis-1,3-Dichloropropylene	9.71		"	10.0		97.1	70-130				
Dibromochloromethane	9.61		"	10.0		96.1	70-130				
Dibromomethane	9.34		"	10.0		93.4	70-130				
Dichlorodifluoromethane	8.20		"	10.0		82.0	70-130				
Ethyl Benzene	9.71		"	10.0		97.1	70-130				
Hexachlorobutadiene	9.99		"	10.0		99.9	70-130				
Isopropylbenzene	9.44		"	10.0		94.4	70-130				
Methyl Methacrylate	10.1		"	10.0		101	70-130				
Methyl tert-butyl ether (MTBE)	9.66		"	10.0		96.6	70-130				
Methylene chloride	9.99		"	10.0		99.9	70-130				
Naphthalene	9.57		"	10.0		95.7	70-130				
n-Butylbenzene	9.58		"	10.0		95.8	70-130				
n-Propylbenzene	9.35		"	10.0		93.5	70-130				
o-Xylene	9.50		"	10.0		95.0	70-130				
p- & m- Xylenes	19.0		"	20.0		95.0	70-130				
p-Isopropyltoluene	9.66		"	10.0		96.6	70-130				
sec-Butylbenzene	9.45		"	10.0		94.5	70-130				
Styrene	9.64		"	10.0		96.4	70-130				
tert-Butylbenzene	9.25		"	10.0		92.5	70-130				
Tetrachloroethylene	5.09		"	10.0		50.9	70-130	Low Bias			
Tetrahydrofuran	10.4		"	10.0		104	70-130				
Toluene	9.74		"	10.0		97.4	70-130				
trans-1,2-Dichloroethylene	10.4		"	10.0		104	70-130				
trans-1,3-Dichloropropylene	9.78		"	10.0		97.8	70-130				
trans-1,4-dichloro-2-butene	9.96		"	10.0		99.6	70-130				
Trichloroethylene	9.83		"	10.0		98.3	70-130				
Trichlorofluoromethane	9.64		"	10.0		96.4	70-130				
Vinyl Chloride	9.52		"	10.0		95.2	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.42		"	10.0		94.2	70-130				
Surrogate: SURR: Toluene-d8	9.65		"	10.0		96.5	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.2		"	10.0		102	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK41575 - EPA 5030B											
LCS Dup (BK41575-BSD1)						Prepared & Analyzed: 11/22/2024					
1,1,1,2-Tetrachloroethane	9.43		ug/L	10.0		94.3	70-130		0.638	30	
1,1,1-Trichloroethane	8.97		"	10.0		89.7	70-130		6.47	30	
1,1,2,2-Tetrachloroethane	9.63		"	10.0		96.3	70-130		0.416	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.34		"	10.0		93.4	70-130		20.7	30	
1,1,2-Trichloroethane	9.38		"	10.0		93.8	70-130		1.17	30	
1,1-Dichloroethane	9.25		"	10.0		92.5	70-130		4.96	30	
1,1-Dichloroethylene	9.40		"	10.0		94.0	70-130		18.4	30	
1,1-Dichloropropylene	9.62		"	10.0		96.2	70-130		5.95	30	
1,2,3-Trichlorobenzene	9.03		"	10.0		90.3	70-130		0.667	30	
1,2,3-Trichloropropane	9.07		"	10.0		90.7	70-130		0.664	30	
1,2,4-Trichlorobenzene	9.57		"	10.0		95.7	70-130		0.313	30	
1,2,4-Trimethylbenzene	9.70		"	10.0		97.0	70-130		1.04	30	
1,2-Dibromo-3-chloropropane	9.89		"	10.0		98.9	70-130		2.99	30	
1,2-Dibromoethane	9.38		"	10.0		93.8	70-130		1.27	30	
1,2-Dichlorobenzene	9.18		"	10.0		91.8	70-130		0.546	30	
1,2-Dichloroethane	9.18		"	10.0		91.8	70-130		4.89	30	
1,2-Dichloropropane	10.0		"	10.0		100	70-130		0.497	30	
1,3,5-Trimethylbenzene	9.63		"	10.0		96.3	70-130		0.834	30	
1,3-Dichlorobenzene	9.24		"	10.0		92.4	70-130		1.64	30	
1,3-Dichloropropane	9.74		"	10.0		97.4	70-130		0.410	30	
1,4-Dichlorobenzene	9.14		"	10.0		91.4	70-130		1.54	30	
2,2-Dichloropropane	9.16		"	10.0		91.6	70-130		6.95	30	
2-Butanone	9.37		"	10.0		93.7	70-130		0.320	30	
2-Chlorotoluene	9.37		"	10.0		93.7	70-130		1.72	30	
2-Hexanone	9.81		"	10.0		98.1	70-130		1.23	30	
4-Chlorotoluene	9.39		"	10.0		93.9	70-130		0.963	30	
4-Methyl-2-pentanone	10.5		"	10.0		105	70-130		0.959	30	
Acetone	7.81		"	10.0		78.1	70-130		4.87	30	
Acrylonitrile	10.4		"	10.0		104	70-130		1.52	30	
Benzene	9.63		"	10.0		96.3	70-130		4.57	30	
Bromobenzene	9.66		"	10.0		96.6	70-130		0.936	30	
Bromochloromethane	9.67		"	10.0		96.7	70-130		2.65	30	
Bromodichloromethane	9.42		"	10.0		94.2	70-130		0.740	30	
Bromoform	9.71		"	10.0		97.1	70-130		0.103	30	
Bromomethane	8.46		"	10.0		84.6	70-130		24.2	30	
Carbon disulfide	8.44		"	10.0		84.4	70-130		27.9	30	
Carbon tetrachloride	9.34		"	10.0		93.4	70-130		6.32	30	
Chlorobenzene	9.47		"	10.0		94.7	70-130		0.632	30	
Chloroethane	7.44		"	10.0		74.4	70-130		25.9	30	
Chloroform	9.07		"	10.0		90.7	70-130		3.47	30	
Chloromethane	4.58		"	10.0		45.8	70-130	Low Bias	65.5	30	Non-dir.
cis-1,2-Dichloroethylene	9.56		"	10.0		95.6	70-130		4.40	30	
cis-1,3-Dichloropropylene	9.60		"	10.0		96.0	70-130		1.14	30	
Dibromochloromethane	9.59		"	10.0		95.9	70-130		0.208	30	
Dibromomethane	9.00		"	10.0		90.0	70-130		3.71	30	
Dichlorodifluoromethane	1.65		"	10.0		16.5	70-130	Low Bias	133	30	Non-dir.
Ethyl Benzene	9.70		"	10.0		97.0	70-130		0.103	30	
Hexachlorobutadiene	9.92		"	10.0		99.2	70-130		0.703	30	
Isopropylbenzene	9.56		"	10.0		95.6	70-130		1.26	30	
Methyl Methacrylate	9.98		"	10.0		99.8	70-130		1.49	30	
Methyl tert-butyl ether (MTBE)	9.17		"	10.0		91.7	70-130		5.20	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41575 - EPA 5030B

LCS Dup (BK41575-BSD1)

Prepared & Analyzed: 11/22/2024

Methylene chloride	9.38		ug/L	10.0		93.8	70-130		6.30	30	
Naphthalene	9.49		"	10.0		94.9	70-130		0.839	30	
n-Butylbenzene	9.63		"	10.0		96.3	70-130		0.521	30	
n-Propylbenzene	9.45		"	10.0		94.5	70-130		1.06	30	
o-Xylene	9.49		"	10.0		94.9	70-130		0.105	30	
p- & m- Xylenes	18.9		"	20.0		94.6	70-130		0.369	30	
p-Isopropyltoluene	9.75		"	10.0		97.5	70-130		0.927	30	
sec-Butylbenzene	9.52		"	10.0		95.2	70-130		0.738	30	
Styrene	9.60		"	10.0		96.0	70-130		0.416	30	
tert-Butylbenzene	9.37		"	10.0		93.7	70-130		1.29	30	
Tetrachloroethylene	4.96		"	10.0		49.6	70-130	Low Bias	2.59	30	
Tetrahydrofuran	10.2		"	10.0		102	70-130		2.03	30	
Toluene	9.56		"	10.0		95.6	70-130		1.87	30	
trans-1,2-Dichloroethylene	9.52		"	10.0		95.2	70-130		8.93	30	
trans-1,3-Dichloropropylene	9.65		"	10.0		96.5	70-130		1.34	30	
trans-1,4-dichloro-2-butene	9.87		"	10.0		98.7	70-130		0.908	30	
Trichloroethylene	9.60		"	10.0		96.0	70-130		2.37	30	
Trichlorofluoromethane	7.29		"	10.0		72.9	70-130		27.8	30	
Vinyl Chloride	5.48		"	10.0		54.8	70-130	Low Bias	53.9	30	Non-dir.
Surrogate: SURR: 1,2-Dichloroethane-d4	9.34		"	10.0		93.4	70-130				
Surrogate: SURR: Toluene-d8	9.65		"	10.0		96.5	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.3		"	10.0		103	70-130				

Batch BK41621 - EPA 5030B

Blank (BK41621-BLK1)

Prepared & Analyzed: 11/23/2024

1,1,1,2-Tetrachloroethane	ND	0.500	ug/L
1,1,1-Trichloroethane	ND	0.500	"
1,1,2,2-Tetrachloroethane	ND	0.500	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.500	"
1,1,2-Trichloroethane	ND	0.500	"
1,1-Dichloroethane	ND	0.500	"
1,1-Dichloroethylene	ND	0.500	"
1,1-Dichloropropylene	ND	0.500	"
1,2,3-Trichlorobenzene	ND	0.500	"
1,2,3-Trichloropropane	ND	0.500	"
1,2,4-Trichlorobenzene	ND	0.500	"
1,2,4-Trimethylbenzene	ND	0.500	"
1,2-Dibromo-3-chloropropane	ND	0.500	"
1,2-Dibromoethane	ND	0.500	"
1,2-Dichlorobenzene	ND	0.500	"
1,2-Dichloroethane	ND	0.500	"
1,2-Dichloropropane	ND	0.500	"
1,3,5-Trimethylbenzene	ND	0.500	"
1,3-Dichlorobenzene	ND	0.500	"
1,3-Dichloropropane	ND	0.500	"
1,4-Dichlorobenzene	ND	0.500	"
2,2-Dichloropropane	ND	0.500	"
2-Butanone	ND	0.500	"
2-Chlorotoluene	ND	0.500	"
2-Hexanone	ND	0.500	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41621 - EPA 5030B

Blank (BK41621-BLK1)

Prepared & Analyzed: 11/23/2024

4-Chlorotoluene	ND	0.500	ug/L								
4-Methyl-2-pentanone	ND	0.500	"								
Acetone	ND	2.00	"								
Acrylonitrile	ND	0.500	"								
Benzene	ND	0.500	"								
Bromobenzene	ND	0.500	"								
Bromochloromethane	ND	0.500	"								
Bromodichloromethane	ND	0.500	"								
Bromoform	ND	0.500	"								
Bromomethane	ND	0.500	"								
Carbon disulfide	ND	0.500	"								
Carbon tetrachloride	ND	0.500	"								
Chlorobenzene	ND	0.500	"								
Chloroethane	ND	0.500	"								
Chloroform	ND	0.500	"								
Chloromethane	ND	0.500	"								
cis-1,2-Dichloroethylene	ND	0.500	"								
cis-1,3-Dichloropropylene	ND	0.500	"								
Dibromochloromethane	ND	0.500	"								
Dibromomethane	ND	0.500	"								
Dichlorodifluoromethane	ND	0.500	"								
Ethyl Benzene	ND	0.500	"								
Hexachlorobutadiene	ND	0.500	"								
Isopropylbenzene	ND	0.500	"								
Methyl Methacrylate	ND	0.500	"								
Methyl tert-butyl ether (MTBE)	ND	0.500	"								
Methylene chloride	ND	2.00	"								
Naphthalene	ND	2.00	"								
n-Butylbenzene	ND	0.500	"								
n-Propylbenzene	ND	0.500	"								
o-Xylene	ND	0.500	"								
p- & m- Xylenes	ND	1.00	"								
p-Isopropyltoluene	ND	0.500	"								
sec-Butylbenzene	ND	0.500	"								
Styrene	ND	0.500	"								
tert-Butylbenzene	ND	0.500	"								
Tetrachloroethylene	ND	0.500	"								
Tetrahydrofuran	ND	4.00	"								
Toluene	ND	0.500	"								
trans-1,2-Dichloroethylene	ND	0.500	"								
trans-1,3-Dichloropropylene	ND	0.500	"								
trans-1,4-dichloro-2-butene	ND	0.500	"								
Trichloroethylene	ND	0.500	"								
Trichlorofluoromethane	ND	0.500	"								
Vinyl Chloride	ND	0.500	"								
Surrogate: SURR: 1,2-Dichloroethane-d4	9.44		"	10.0		94.4	70-130				
Surrogate: SURR: Toluene-d8	9.56		"	10.0		95.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	10.2		"	10.0		102	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41621 - EPA 5030B

LCS (BK41621-BS1)

Prepared & Analyzed: 11/23/2024

1,1,1,2-Tetrachloroethane	10.5		ug/L	10.0		105	70-130				
1,1,1-Trichloroethane	10.3		"	10.0		103	70-130				
1,1,2,2-Tetrachloroethane	11.7		"	10.0		117	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.6		"	10.0		126	70-130				
1,1,2-Trichloroethane	10.8		"	10.0		108	70-130				
1,1-Dichloroethane	10.6		"	10.0		106	70-130				
1,1-Dichloroethylene	11.9		"	10.0		119	70-130				
1,1-Dichloropropylene	11.2		"	10.0		112	70-130				
1,2,3-Trichlorobenzene	12.3		"	10.0		123	70-130				
1,2,3-Trichloropropane	10.3		"	10.0		103	70-130				
1,2,4-Trichlorobenzene	12.0		"	10.0		120	70-130				
1,2,4-Trimethylbenzene	10.2		"	10.0		102	70-130				
1,2-Dibromo-3-chloropropane	11.8		"	10.0		118	70-130				
1,2-Dibromoethane	11.0		"	10.0		110	70-130				
1,2-Dichlorobenzene	10.2		"	10.0		102	70-130				
1,2-Dichloroethane	11.1		"	10.0		111	70-130				
1,2-Dichloropropane	11.0		"	10.0		110	70-130				
1,3,5-Trimethylbenzene	10.0		"	10.0		100	70-130				
1,3-Dichlorobenzene	10.1		"	10.0		101	70-130				
1,3-Dichloropropane	11.3		"	10.0		113	70-130				
1,4-Dichlorobenzene	10.1		"	10.0		101	70-130				
2,2-Dichloropropane	12.0		"	10.0		120	70-130				
2-Butanone	11.4		"	10.0		114	70-130				
2-Chlorotoluene	9.60		"	10.0		96.0	70-130				
2-Hexanone	11.9		"	10.0		119	70-130				
4-Chlorotoluene	9.78		"	10.0		97.8	70-130				
4-Methyl-2-pentanone	12.7		"	10.0		127	70-130				
Acetone	10.2		"	10.0		102	70-130				
Acrylonitrile	13.2		"	10.0		132	70-130	High Bias			
Benzene	11.0		"	10.0		110	70-130				
Bromobenzene	10.1		"	10.0		101	70-130				
Bromochloromethane	11.5		"	10.0		115	70-130				
Bromodichloromethane	10.4		"	10.0		104	70-130				
Bromoform	11.7		"	10.0		117	70-130				
Bromomethane	12.8		"	10.0		128	70-130				
Carbon disulfide	11.4		"	10.0		114	70-130				
Carbon tetrachloride	10.9		"	10.0		109	70-130				
Chlorobenzene	10.4		"	10.0		104	70-130				
Chloroethane	10.1		"	10.0		101	70-130				
Chloroform	10.4		"	10.0		104	70-130				
Chloromethane	8.62		"	10.0		86.2	70-130				
cis-1,2-Dichloroethylene	11.2		"	10.0		112	70-130				
cis-1,3-Dichloropropylene	11.0		"	10.0		110	70-130				
Dibromochloromethane	11.1		"	10.0		111	70-130				
Dibromomethane	10.5		"	10.0		105	70-130				
Dichlorodifluoromethane	5.85		"	10.0		58.5	70-130	Low Bias			
Ethyl Benzene	10.4		"	10.0		104	70-130				
Hexachlorobutadiene	11.6		"	10.0		116	70-130				
Isopropylbenzene	9.68		"	10.0		96.8	70-130				
Methyl Methacrylate	12.1		"	10.0		121	70-130				
Methyl tert-butyl ether (MTBE)	11.7		"	10.0		117	70-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41621 - EPA 5030B

LCS (BK41621-BS1)

Prepared & Analyzed: 11/23/2024

Methylene chloride	11.8		ug/L	10.0		118	70-130				
Naphthalene	12.4		"	10.0		124	70-130				
n-Butylbenzene	10.6		"	10.0		106	70-130				
n-Propylbenzene	9.75		"	10.0		97.5	70-130				
o-Xylene	10.3		"	10.0		103	70-130				
p- & m- Xylenes	20.4		"	20.0		102	70-130				
p-Isopropyltoluene	10.5		"	10.0		105	70-130				
sec-Butylbenzene	10.1		"	10.0		101	70-130				
Styrene	10.5		"	10.0		105	70-130				
tert-Butylbenzene	9.76		"	10.0		97.6	70-130				
Tetrachloroethylene	5.49		"	10.0		54.9	70-130	Low Bias			
Tetrahydrofuran	13.0		"	10.0		130	70-130				
Toluene	10.2		"	10.0		102	70-130				
trans-1,2-Dichloroethylene	11.2		"	10.0		112	70-130				
trans-1,3-Dichloropropylene	11.4		"	10.0		114	70-130				
trans-1,4-dichloro-2-butene	11.1		"	10.0		111	70-130				
Trichloroethylene	9.56		"	10.0		95.6	70-130				
Trichlorofluoromethane	9.94		"	10.0		99.4	70-130				
Vinyl Chloride	9.05		"	10.0		90.5	70-130				
Surrogate: SURR: 1,2-Dichloroethane-d4	9.73		"	10.0		97.3	70-130				
Surrogate: SURR: Toluene-d8	9.26		"	10.0		92.6	70-130				
Surrogate: SURR: p-Bromofluorobenzene	9.74		"	10.0		97.4	70-130				



Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41675 - EPA 3510C

Blank (BK41675-BLK2)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Acenaphthene	ND	0.0500	ug/L
Acenaphthylene	ND	0.0500	"
Anthracene	ND	0.0500	"
Benzo(a)anthracene	ND	0.0500	"
Benzo(a)pyrene	ND	0.0500	"
Benzo(b)fluoranthene	ND	0.0500	"
Benzo(g,h,i)perylene	ND	0.0500	"
Benzo(k)fluoranthene	ND	0.0500	"
Chrysene	ND	0.0500	"
Dibenzo(a,h)anthracene	ND	0.0500	"
Fluoranthene	ND	0.0500	"
Fluorene	ND	0.0500	"
Indeno(1,2,3-cd)pyrene	ND	0.0500	"
Naphthalene	ND	0.0500	"
Phenanthrene	ND	0.0500	"
Pyrene	ND	0.0500	"



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41691 - EPA 1633 Prep

Blank (BK41691-BLK1)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Perfluorobutanesulfonic acid (PFBS)	ND	1.77	ng/L								
Perfluorohexanoic acid (PFHxA)	ND	2.00	"								
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"								
Perfluorohexanesulfonic acid (PFHxS)	ND	1.83	"								
Perfluorooctanoic acid (PFOA)	ND	2.00	"								
Perfluorooctanesulfonic acid (PFOS)	ND	1.86	"								
Perfluorononanoic acid (PFNA)	ND	2.00	"								
Perfluorodecanoic acid (PFDA)	ND	2.00	"								
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"								
Perfluorododecanoic acid (PFDoA)	ND	2.00	"								
Perfluorotridecanoic acid (PFTrDA)	ND	2.00	"								
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"								
N-MeFOSAA	ND	2.00	"								
N-EtFOSAA	ND	2.00	"								
Perfluoropentanoic acid (PFPeA)	ND	4.00	"								
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"								
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.91	"								
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.93	"								
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	7.60	"								
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	7.68	"								
Perfluoro-n-butanoic acid (PFBA)	ND	8.00	"								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	3.56	"								
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	4.00	"								
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	4.00	"								
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	4.00	"								
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.88	"								
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	7.50	"								
HFPO-DA (Gen-X)	ND	8.00	"								
11CL-PF3OUdS	ND	7.56	"								
9CL-PF3ONS	ND	7.48	"								
ADONA	ND	7.56	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	1.94	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	1.92	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	5.00	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	25.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	25.0	"								
N-MeFOSE	ND	20.0	"								
N-MeFOSA	ND	2.00	"								
N-EtFOSE	ND	20.0	"								
N-EtFOSA	ND	2.00	"								
Surrogate: M3PFBS	32.0		"	23.3		138	25-150				
Surrogate: M5PFHxA	34.2		"	25.0		137	25-150				
Surrogate: M4PFHpA	29.1		"	25.0		117	25-150				
Surrogate: M3PFHxS	33.5		"	23.7		142	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	35.3		"	25.0		141	25-150				
Surrogate: M6PFDA	14.8		"	12.5		118	25-150				
Surrogate: M7PFUdA	16.6		"	12.5		133	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	19.7		"	12.5		158	25-150				
Surrogate: M2PFTeDA	22.0		"	12.5		176	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41691 - EPA 1633 Prep

Blank (BK41691-BLK1)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.06		ng/L	100		4.06	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	30.7		"	24.0		128	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	43.5		"	50.0		87.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	35.0		"	25.0		140	10-150				
Surrogate: d3-N-MeFOSAA	64.1		"	50.0		128	25-150				
Surrogate: d5-N-EtFOSAA	67.9		"	50.0		136	25-150				
Surrogate: M2-6:2 FTS	110		"	47.6		232	25-200				
Surrogate: M2-8:2 FTS	84.5		"	48.0		176	25-200				
Surrogate: M9PFNA	14.7		"	12.5		118	25-150				
Surrogate: M2-4:2 FTS	101		"	46.9		214	25-150				
Surrogate: d-N-MeFOSA	38.0		"	25.0		152	25-150				
Surrogate: d-N-EtFOSA	37.2		"	25.0		149	25-150				
Surrogate: M3HFPO-DA	156		"	100		156	25-150				
Surrogate: d9-N-EtFOSE	210		"	250		84.1	25-150				
Surrogate: d7-N-MeFOSE	224		"	250		89.6	25-150				

LCS (BK41691-BS1)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Perfluorobutanesulfonic acid (PFBS)	40.1	1.77	ng/L	35.4		113	50-150				
Perfluorohexanoic acid (PFHxA)	40.7	2.00	"	40.0		102	50-150				
Perfluoroheptanoic acid (PFHpA)	49.7	2.00	"	40.0		124	50-150				
Perfluorohexanesulfonic acid (PFHxS)	45.7	1.83	"	36.6		125	50-150				
Perfluorooctanoic acid (PFOA)	44.9	2.00	"	40.0		112	50-150				
Perfluorooctanesulfonic acid (PFOS)	45.0	1.86	"	37.2		121	50-150				
Perfluorononanoic acid (PFNA)	45.5	2.00	"	40.0		114	50-150				
Perfluorodecanoic acid (PFDA)	54.2	2.00	"	40.0		135	50-150				
Perfluoroundecanoic acid (PFUnA)	48.5	2.00	"	40.0		121	50-150				
Perfluorododecanoic acid (PFDoA)	44.2	2.00	"	40.0		110	50-150				
Perfluorotridecanoic acid (PFTTrDA)	44.3	2.00	"	40.0		111	50-150				
Perfluorotetradecanoic acid (PFTA)	43.5	2.00	"	40.0		109	50-150				
N-MeFOSAA	40.8	2.00	"	40.0		102	50-150				
N-EtFOSAA	49.1	2.00	"	40.0		123	50-150				
Perfluoropentanoic acid (PFPeA)	87.0	4.00	"	80.0		109	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	52.3	2.00	"	40.0		131	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	46.5	1.91	"	38.2		122	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	46.3	1.93	"	38.6		120	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	151	7.60	"	152		99.2	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	164	7.68	"	154		106	50-150				
Perfluoro-n-butanoic acid (PFBA)	153	8.00	"	160		95.6	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	76.2	3.56	"	71.2		107	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	95.4	4.00	"	80.0		119	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	16.2	4.00	"	80.0		20.2	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	114	4.00	"	80.0		143	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	44.3	1.88	"	37.6		118	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	168	7.50	"	150		112	50-150				
HFPO-DA (Gen-X)	84.5	8.00	"	80.0		106	50-150				
11CL-PF3OUdS	73.3	7.56	"	75.6		97.0	50-150				
9CL-PF3ONS	80.1	7.48	"	74.8		107	50-150				
ADONA	77.4	7.56	"	75.6		102	50-150				

Low Bias





PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41691 - EPA 1633 Prep

LCS (BK41691-BS1)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Perfluorododecanesulfonic acid (PFDoS)	40.9	1.94	ng/L	38.8		106	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	52.6	1.92	"	38.4		137	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	99.3	5.00	"	160		62.1	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	795	25.0	"	800		99.4	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	828	25.0	"	800		104	50-150				
N-MeFOSE	427	20.0	"	400		107	50-150				
N-MeFOSA	44.6	2.00	"	40.0		112	50-150				
N-EtFOSE	384	20.0	"	400		96.1	50-150				
N-EtFOSA	42.1	2.00	"	40.0		105	50-150				
Surrogate: M3PFBS	29.2		"	23.3		125	25-150				
Surrogate: M5PFHxA	34.0		"	25.0		136	25-150				
Surrogate: M4PFHpA	33.3		"	25.0		133	25-150				
Surrogate: M3PFHxS	31.1		"	23.7		131	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	29.7		"	25.0		119	25-150				
Surrogate: M6PFDA	13.1		"	12.5		105	25-150				
Surrogate: M7PFUdA	16.2		"	12.5		130	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	18.6		"	12.5		149	25-150				
Surrogate: M2PFTeDA	21.6		"	12.5		173	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	4.43		"	100		4.43	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	29.5		"	23.9		123	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	44.5		"	50.0		89.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	33.2		"	25.0		133	10-150				
Surrogate: d3-N-MeFOSAA	70.5		"	50.0		141	25-150				
Surrogate: d5-N-EtFOSAA	66.3		"	50.0		133	25-150				
Surrogate: M2-6:2 FTS	108		"	47.5		227	25-200				
Surrogate: M2-8:2 FTS	86.5		"	48.0		180	25-200				
Surrogate: M9PFNA	18.3		"	12.5		147	25-150				
Surrogate: M2-4:2 FTS	85.7		"	46.9		183	25-150				
Surrogate: d-N-MeFOSA	39.8		"	25.0		159	25-150				
Surrogate: d-N-EtFOSA	40.3		"	25.0		161	25-150				
Surrogate: M3HFPO-DA	147		"	100		147	25-150				
Surrogate: d9-N-EtFOSE	223		"	250		89.2	25-150				
Surrogate: d7-N-MeFOSE	219		"	250		87.7	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41691 - EPA 1633 Prep

LCS (BK41691-BS2)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Perfluorobutanesulfonic acid (PFBS)	3.89	1.77	ng/L	3.54		110	50-150				
Perfluorohexanoic acid (PFHxA)	4.00	2.00	"	4.00		100	50-150				
Perfluoroheptanoic acid (PFHpA)	4.66	2.00	"	4.00		117	50-150				
Perfluorohexanesulfonic acid (PFHxS)	3.89	1.83	"	3.66		106	50-150				
Perfluorooctanoic acid (PFOA)	3.64	2.00	"	4.00		91.1	50-150				
Perfluorooctanesulfonic acid (PFOS)	4.29	1.86	"	3.72		115	50-150				
Perfluorononanoic acid (PFNA)	4.18	2.00	"	4.00		105	50-150				
Perfluorodecanoic acid (PFDA)	4.19	2.00	"	4.00		105	50-150				
Perfluoroundecanoic acid (PFUnA)	4.40	2.00	"	4.00		110	50-150				
Perfluorododecanoic acid (PFDoA)	4.79	2.00	"	4.00		120	50-150				
Perfluorotridecanoic acid (PFTrDA)	4.39	2.00	"	4.00		110	50-150				
Perfluorotetradecanoic acid (PFTA)	4.34	2.00	"	4.00		108	50-150				
N-MeFOSAA	3.85	2.00	"	4.00		96.2	50-150				
N-EtFOSAA	4.13	2.00	"	4.00		103	50-150				
Perfluoropentanoic acid (PFPeA)	8.06	4.00	"	8.00		101	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	4.52	2.00	"	4.00		113	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	3.98	1.91	"	3.82		104	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	4.17	1.93	"	3.86		108	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	14.4	7.60	"	15.2		94.9	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	16.3	7.68	"	15.4		106	50-150				
Perfluoro-n-butanoic acid (PFBA)	13.2	8.00	"	16.0		82.4	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	7.17	3.56	"	7.12		101	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	6.00	4.00	"	8.00		75.0	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	1.72	4.00	"	8.00		21.5	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	9.95	4.00	"	8.00		124	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	3.39	1.88	"	3.76		90.3	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	16.0	7.50	"	15.0		107	50-150				
HFPO-DA (Gen-X)	8.41	8.00	"	8.00		105	50-150				
11CL-PF3OUdS	7.68	7.56	"	7.56		102	50-150				
9CL-PF3ONS	7.61	7.48	"	7.48		102	50-150				
ADONA	7.78	7.56	"	7.56		103	50-150				
Perfluorododecanesulfonic acid (PFDoS)	4.34	1.94	"	3.88		112	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	5.22	1.92	"	3.84		136	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	10.4	5.00	"	16.0		65.0	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	76.0	25.0	"	80.0		95.0	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	79.8	25.0	"	80.0		99.8	50-150				
N-MeFOSE	41.2	20.0	"	40.0		103	50-150				
N-MeFOSA	4.04	2.00	"	4.00		101	50-150				
N-EtFOSE	38.0	20.0	"	40.0		95.1	50-150				
N-EtFOSA	4.23	2.00	"	4.00		106	50-150				
Surrogate: M3PFBS	26.6		"	23.3		114	25-150				
Surrogate: M5PFHxA	27.8		"	25.0		111	25-150				
Surrogate: M4PFHpA	30.0		"	25.0		120	25-150				
Surrogate: M3PFHxS	29.0		"	23.7		122	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	29.3		"	25.0		117	25-150				
Surrogate: M6PFDA	12.2		"	12.5		97.8	25-150				
Surrogate: M7PFUdA	15.0		"	12.5		120	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	14.9		"	12.5		119	25-150				
Surrogate: M2PFTeDA	20.2		"	12.5		161	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41691 - EPA 1633 Prep

LCS (BK41691-BS2)

Prepared: 11/25/2024 Analyzed: 11/26/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	5.19		ng/L	100		5.19	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	25.5		"	23.9		107	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	42.3		"	50.0		84.5	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	28.5		"	25.0		114	10-150				
Surrogate: d3-N-MeFOSAA	58.7		"	50.0		117	25-150				
Surrogate: d5-N-EtFOSAA	58.7		"	50.0		117	25-150				
Surrogate: M2-6:2 FTS	99.1		"	47.5		208	25-200				
Surrogate: M2-8:2 FTS	75.5		"	48.0		157	25-200				
Surrogate: M9PFNA	13.8		"	12.5		110	25-150				
Surrogate: M2-4:2 FTS	86.5		"	46.9		185	25-150				
Surrogate: d-N-MeFOSA	31.5		"	25.0		126	25-150				
Surrogate: d-N-EtFOSA	33.7		"	25.0		135	25-150				
Surrogate: M3HFPO-DA	120		"	100		120	25-150				
Surrogate: d9-N-EtFOSE	206		"	250		82.2	25-150				
Surrogate: d7-N-MeFOSE	209		"	250		83.7	25-150				

Batch BK41817 - EPA 1633 Prep

Blank (BK41817-BLK1)

Prepared: 11/26/2024 Analyzed: 11/28/2024

Perfluorobutanesulfonic acid (PFBS)	ND	1.77	ng/L
Perfluorohexanoic acid (PFHxA)	ND	2.00	"
Perfluoroheptanoic acid (PFHpA)	ND	2.00	"
Perfluorohexanesulfonic acid (PFHxS)	ND	1.83	"
Perfluorooctanoic acid (PFOA)	ND	2.00	"
Perfluorooctanesulfonic acid (PFOS)	ND	1.86	"
Perfluorononanoic acid (PFNA)	ND	2.00	"
Perfluorodecanoic acid (PFDA)	ND	2.00	"
Perfluoroundecanoic acid (PFUnA)	ND	2.00	"
Perfluorododecanoic acid (PFDoA)	ND	2.00	"
Perfluorotridecanoic acid (PFTTrDA)	ND	2.00	"
Perfluorotetradecanoic acid (PFTA)	ND	2.00	"
N-MeFOSAA	ND	2.00	"
N-EtFOSAA	ND	2.00	"
Perfluoropentanoic acid (PFPeA)	ND	4.00	"
Perfluoro-1-octanesulfonamide (FOSA)	ND	2.00	"
Perfluoro-1-heptanesulfonic acid (PFHpS)	ND	1.91	"
Perfluoro-1-decanesulfonic acid (PFDS)	ND	1.93	"
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F)	ND	7.60	"
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F)	ND	7.68	"
Perfluoro-n-butanoic acid (PFBA)	ND	8.00	"
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	ND	3.56	"
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	ND	4.00	"
Perfluoro-4-oxapentanoic acid (PFMPA)	ND	4.00	"
Perfluoro-5-oxahexanoic acid (PFMBA)	ND	4.00	"
Perfluoro-1-pentanesulfonate (PFPeS)	ND	1.88	"
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F)	ND	7.50	"
HFPO-DA (Gen-X)	ND	8.00	"
11CL-PF3OUdS	ND	7.56	"



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41817 - EPA 1633 Prep

Blank (BK41817-BLK1)

Prepared: 11/26/2024 Analyzed: 11/28/2024

9CL-PF3ONS	ND	7.48	ng/L								
ADONA	ND	7.56	"								
Perfluorododecanesulfonic acid (PFDoS)	ND	1.94	"								
Perfluoro-1-nonanesulfonic acid (PFNS)	ND	1.92	"								
3-Perfluoropropyl propanoic acid (FPrPA)	ND	5.00	"								
3-Perfluoropentyl propanoic acid (FPePA)	ND	25.0	"								
3-Perfluoroheptyl propanoic acid (FHpPA)	ND	25.0	"								
N-MeFOSE	ND	20.0	"								
N-MeFOSA	ND	2.00	"								
N-EtFOSE	ND	20.0	"								
N-EtFOSA	ND	2.00	"								
Surrogate: M3PFBS	27.7		"	23.3		119	25-150				
Surrogate: M5PFHxA	32.0		"	25.0		128	25-150				
Surrogate: M4PFHpA	29.6		"	25.0		118	25-150				
Surrogate: M3PFHxS	28.9		"	23.7		122	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	29.6		"	25.0		118	25-150				
Surrogate: M6PFDA	17.2		"	12.5		137	25-150				
Surrogate: M7PFUdA	18.6		"	12.5		149	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	19.8		"	12.5		158	25-150				
Surrogate: M2PFTeDA	15.4		"	12.5		123	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	19.6		"	100		19.6	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	26.4		"	24.0		110	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	56.9		"	50.0		114	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	27.2		"	25.0		109	10-150				
Surrogate: d3-N-MeFOSAA	56.0		"	50.0		112	25-150				
Surrogate: d5-N-EtFOSAA	54.5		"	50.0		109	25-150				
Surrogate: M2-6:2 FTS	87.5		"	47.6		184	25-200				
Surrogate: M2-8:2 FTS	65.9		"	48.0		137	25-200				
Surrogate: M9PFNA	13.7		"	12.5		110	25-150				
Surrogate: M2-4:2 FTS	78.2		"	46.9		167	25-150				
Surrogate: d-N-MeFOSA	32.9		"	25.0		131	25-150				
Surrogate: d-N-EtFOSA	34.1		"	25.0		136	25-150				
Surrogate: M3HFPO-DA	135		"	100		135	25-150				
Surrogate: d9-N-EtFOSE	218		"	250		87.1	25-150				
Surrogate: d7-N-MeFOSE	217		"	250		86.7	25-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41817 - EPA 1633 Prep

LCS (BK41817-BS1)

Prepared: 11/26/2024 Analyzed: 11/28/2024

Perfluorobutanesulfonic acid (PFBS)	33.5	1.77	ng/L	35.4		94.6	50-150				
Perfluorohexanoic acid (PFHxA)	35.7	2.00	"	40.0		89.3	50-150				
Perfluoroheptanoic acid (PFHpA)	45.4	2.00	"	40.0		114	50-150				
Perfluorohexanesulfonic acid (PFHxS)	37.3	1.83	"	36.6		102	50-150				
Perfluorooctanoic acid (PFOA)	37.3	2.00	"	40.0		93.1	50-150				
Perfluorooctanesulfonic acid (PFOS)	40.4	1.86	"	37.2		109	50-150				
Perfluorononanoic acid (PFNA)	41.3	2.00	"	40.0		103	50-150				
Perfluorodecanoic acid (PFDA)	37.4	2.00	"	40.0		93.4	50-150				
Perfluoroundecanoic acid (PFUnA)	40.8	2.00	"	40.0		102	50-150				
Perfluorododecanoic acid (PFDoA)	34.4	2.00	"	40.0		85.9	50-150				
Perfluorotridecanoic acid (PFTriDA)	49.1	2.00	"	40.0		123	50-150				
Perfluorotetradecanoic acid (PFTA)	38.9	2.00	"	40.0		97.3	50-150				
N-MeFOSAA	38.2	2.00	"	40.0		95.5	50-150				
N-EtFOSAA	38.4	2.00	"	40.0		96.0	50-150				
Perfluoropentanoic acid (PFPeA)	78.1	4.00	"	80.0		97.6	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	42.2	2.00	"	40.0		106	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	42.2	1.91	"	38.2		110	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	39.3	1.93	"	38.6		102	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	133	7.60	"	152		87.5	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	147	7.68	"	154		96.0	50-150				
Perfluoro-n-butanoic acid (PFBA)	149	8.00	"	160		93.4	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEA)	61.9	3.56	"	71.2		87.0	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	69.9	4.00	"	80.0		87.4	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	37.0	4.00	"	80.0		46.3	50-150	Low Bias			
Perfluoro-5-oxahexanoic acid (PFMBA)	73.7	4.00	"	80.0		92.2	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	37.6	1.88	"	37.6		100	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	144	7.50	"	150		96.3	50-150				
HFPO-DA (Gen-X)	76.9	8.00	"	80.0		96.1	50-150				
11CL-PF3OUdS	65.4	7.56	"	75.6		86.4	50-150				
9CL-PF3ONS	71.3	7.48	"	74.8		95.3	50-150				
ADONA	67.2	7.56	"	75.6		88.9	50-150				
Perfluorododecanesulfonic acid (PFDoS)	34.1	1.94	"	38.8		87.8	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	42.4	1.92	"	38.4		110	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	133	5.00	"	160		83.2	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	767	25.0	"	800		95.9	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	679	25.0	"	800		84.9	50-150				
N-MeFOSE	418	20.0	"	400		105	50-150				
N-MeFOSA	40.2	2.00	"	40.0		101	50-150				
N-EtFOSE	416	20.0	"	400		104	50-150				
N-EtFOSA	39.0	2.00	"	40.0		97.5	50-150				
Surrogate: M3PFBS	28.8		"	23.3		123	25-150				
Surrogate: M5PFHxA	35.4		"	25.0		142	25-150				
Surrogate: M4PFHpA	29.7		"	25.0		119	25-150				
Surrogate: M3PFHxS	31.1		"	23.7		131	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	29.5		"	25.0		118	25-150				
Surrogate: M6PFDA	14.9		"	12.5		119	25-150				
Surrogate: M7PFUdA	15.2		"	12.5		121	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	17.7		"	12.5		142	25-150				
Surrogate: M2PFTeDA	13.0		"	12.5		104	10-150				



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41817 - EPA 1633 Prep

LCS (BK41817-BS1)

Prepared: 11/26/2024 Analyzed: 11/28/2024

Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	22.0		ng/L	100		22.0	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	24.0		"	24.0		100	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	62.8		"	50.0		126	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	27.6		"	25.0		110	10-150				
Surrogate: d3-N-MeFOSAA	53.4		"	50.0		107	25-150				
Surrogate: d5-N-EtFOSAA	54.1		"	50.0		108	25-150				
Surrogate: M2-6:2 FTS	94.1		"	47.6		198	25-200				
Surrogate: M2-8:2 FTS	72.4		"	48.0		151	25-200				
Surrogate: M9PFNA	14.6		"	12.5		117	25-150				
Surrogate: M2-4:2 FTS	76.8		"	46.9		164	25-150				
Surrogate: d-N-MeFOSA	29.2		"	25.0		117	25-150				
Surrogate: d-N-EtFOSA	25.0		"	25.0		100	25-150				
Surrogate: M3HFPO-DA	144		"	100		144	25-150				
Surrogate: d9-N-EtFOSE	150		"	250		59.9	25-150				
Surrogate: d7-N-MeFOSE	191		"	250		76.4	25-150				

LCS (BK41817-BS2)

Prepared: 11/26/2024 Analyzed: 11/28/2024

Perfluorobutanesulfonic acid (PFBS)	3.35	1.77	ng/L	3.54		94.6	50-150				
Perfluorohexanoic acid (PFHxA)	3.63	2.00	"	4.00		90.8	50-150				
Perfluoroheptanoic acid (PFHpA)	5.17	2.00	"	4.00		129	50-150				
Perfluorohexanesulfonic acid (PFHxS)	3.80	1.83	"	3.66		104	50-150				
Perfluorooctanoic acid (PFOA)	3.51	2.00	"	4.00		87.9	50-150				
Perfluorooctanesulfonic acid (PFOS)	4.87	1.86	"	3.72		131	50-150				
Perfluorononanoic acid (PFNA)	3.86	2.00	"	4.00		96.4	50-150				
Perfluorodecanoic acid (PFDA)	3.60	2.00	"	4.00		90.0	50-150				
Perfluoroundecanoic acid (PFUnA)	3.55	2.00	"	4.00		88.8	50-150				
Perfluorododecanoic acid (PFDoA)	3.24	2.00	"	4.00		80.9	50-150				
Perfluorotridecanoic acid (PFTTrDA)	4.10	2.00	"	4.00		102	50-150				
Perfluorotetradecanoic acid (PFTA)	3.14	2.00	"	4.00		78.5	50-150				
N-MeFOSAA	3.14	2.00	"	4.00		78.5	50-150				
N-EtFOSAA	4.09	2.00	"	4.00		102	50-150				
Perfluoropentanoic acid (PFPeA)	7.34	4.00	"	8.00		91.7	50-150				
Perfluoro-1-octanesulfonamide (FOSA)	3.95	2.00	"	4.00		98.7	50-150				
Perfluoro-1-heptanesulfonic acid (PFHpS)	2.90	1.91	"	3.82		76.0	50-150				
Perfluoro-1-decanesulfonic acid (PFDS)	3.95	1.93	"	3.86		102	50-150				
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 F	12.6	7.60	"	15.2		82.9	50-150				
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 F	14.0	7.68	"	15.4		91.2	50-150				
Perfluoro-n-butanoic acid (PFBA)	13.4	8.00	"	16.0		83.7	50-150				
Perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	6.00	3.56	"	7.12		84.3	50-150				
Perfluoro-3,6-dioxahexanoic acid (NFDHA)	8.66	4.00	"	8.00		108	50-150				
Perfluoro-4-oxapentanoic acid (PFMPA)	2.62	4.00	"	8.00		32.8	50-150				
Perfluoro-5-oxahexanoic acid (PFMBA)	7.00	4.00	"	8.00		87.5	50-150				
Perfluoro-1-pentanesulfonate (PFPeS)	3.94	1.88	"	3.76		105	50-150				
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 F	14.4	7.50	"	15.0		96.2	50-150				
HFPO-DA (Gen-X)	5.63	8.00	"	8.00		70.4	50-150				
11CL-PF3OUdS	6.28	7.56	"	7.56		83.1	50-150				
9CL-PF3ONS	5.93	7.48	"	7.48		79.3	50-150				
ADONA	6.04	7.56	"	7.56		79.8	50-150				

Low Bias



PFAS Target compounds by LC/MS-MS - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41817 - EPA 1633 Prep

LCS (BK41817-BS2)

Prepared: 11/26/2024 Analyzed: 11/28/2024

Perfluorododecanesulfonic acid (PFDoS)	4.03	1.94	ng/L	3.88		104	50-150				
Perfluoro-1-nonanesulfonic acid (PFNS)	3.55	1.92	"	3.84		92.6	50-150				
3-Perfluoropropyl propanoic acid (FPrPA)	13.1	5.00	"	16.0		81.6	50-150				
3-Perfluoropentyl propanoic acid (FPePA)	74.2	25.0	"	80.0		92.8	50-150				
3-Perfluoroheptyl propanoic acid (FHpPA)	62.7	25.0	"	80.0		78.3	50-150				
N-MeFOSE	36.3	20.0	"	40.0		90.8	50-150				
N-MeFOSA	3.80	2.00	"	4.00		95.0	50-150				
N-EtFOSE	36.3	20.0	"	40.0		90.6	50-150				
N-EtFOSA	4.11	2.00	"	4.00		103	50-150				
Surrogate: M3PFBS	25.7		"	23.3		110	25-150				
Surrogate: M5PFHxA	33.1		"	25.0		132	25-150				
Surrogate: M4PFHpA	28.7		"	25.0		115	25-150				
Surrogate: M3PFHxS	27.4		"	23.7		116	25-150				
Surrogate: Perfluoro-n-[13C8]octanoic acid (M8PFOA)	36.4		"	25.0		146	25-150				
Surrogate: M6PFDA	13.9		"	12.5		111	25-150				
Surrogate: M7PFUdA	16.5		"	12.5		132	25-150				
Surrogate: Perfluoro-n-[1,2-13C2]dodecanoic acid (MPFDoA)	17.4		"	12.5		139	25-150				
Surrogate: M2PFTeDA	14.3		"	12.5		115	10-150				
Surrogate: Perfluoro-n-[13C4]butanoic acid (MPFBA)	14.3		"	100		14.3	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonic acid (M8PFOS)	30.7		"	24.0		128	25-150				
Surrogate: Perfluoro-n-[13C5]pentanoic acid (M5PFPeA)	60.4		"	50.0		121	25-150				
Surrogate: Perfluoro-1-[13C8]octanesulfonamide (M8FOSA)	32.8		"	25.0		131	10-150				
Surrogate: d3-N-MeFOSAA	64.9		"	50.0		130	25-150				
Surrogate: d5-N-EtFOSAA	65.5		"	50.0		131	25-150				
Surrogate: M2-6:2 FTS	81.8		"	47.6		172	25-200				
Surrogate: M2-8:2 FTS	60.5		"	48.0		126	25-200				
Surrogate: M9PFNA	17.4		"	12.5		140	25-150				
Surrogate: M2-4:2 FTS	72.2		"	46.9		154	25-150				
Surrogate: d-N-MeFOSA	34.4		"	25.0		137	25-150				
Surrogate: d-N-EtFOSA	29.5		"	25.0		118	25-150				
Surrogate: M3HFPO-DA	149		"	100		149	25-150				
Surrogate: d9-N-EtFOSE	223		"	250		89.3	25-150				
Surrogate: d7-N-MeFOSE	258		"	250		103	25-150				



Gas Chromatography/Flame Ionization Detector - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41608 - EPA SW846-3510C Low Level

Blank (BK41608-BLK1)

Prepared & Analyzed: 11/24/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	ND	0.150	mg/L								
Surrogate: 1-Chlorooctadecane	0.0609		"	0.100		60.9	30-140				

LCS (BK41608-BS1)

Prepared & Analyzed: 11/24/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.561	0.150	mg/L	0.750		74.8	60-120				
Surrogate: 1-Chlorooctadecane	0.0569		"	0.100		56.9	30-140				

LCS Dup (BK41608-BSD1)

Prepared & Analyzed: 11/24/2024

ETPH (Extractable Total Petroleum Hydrocarbons)	0.569	0.150	mg/L	0.750		75.8	60-120		1.30	30	
Surrogate: 1-Chlorooctadecane	0.0562		"	0.100		56.2	30-140				



Metals by ICP/MS - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41554 - EPA 3015A

Blank (BK41554-BLK1)

Prepared & Analyzed: 11/22/2024

Antimony	ND	0.00111	mg/L
Arsenic	ND	0.00111	"
Barium	ND	0.00111	"
Beryllium	ND	0.000333	"
Cadmium	ND	0.000556	"
Chromium	ND	0.00111	"
Copper	ND	0.00111	"
Lead	ND	0.00111	"
Nickel	ND	0.00111	"
Selenium	0.00355	0.00111	"
Silver	ND	0.00111	"
Thallium	ND	0.00111	"
Vanadium	ND	0.00111	"
Zinc	ND	0.00111	"

LCS (BK41554-BS1)

Prepared & Analyzed: 11/22/2024

Antimony	0.042	ug/mL	0.0500	83.9	80-120
Arsenic	0.051	"	0.0500	101	80-120
Barium	0.054	"	0.0500	107	80-120
Beryllium	0.044	"	0.0500	88.1	80-120
Cadmium	0.047	"	0.0500	94.6	80-120
Chromium	0.050	"	0.0500	100	80-120
Copper	0.049	"	0.0500	98.6	80-120
Lead	0.053	"	0.0500	106	80-120
Nickel	0.048	"	0.0500	96.6	80-120
Selenium	0.046	"	0.0500	91.8	80-120
Silver	0.049	"	0.0500	98.4	80-120
Thallium	0.051	"	0.0500	103	80-120
Vanadium	0.051	"	0.0500	102	80-120
Zinc	0.064	"	0.0500	129	80-120 High Bias



Metals by ICP/MS - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag

Batch BK41663 - EPA 3015A

Blank (BK41663-BLK1)

Prepared & Analyzed: 11/25/2024

Antimony	ND	0.00111	mg/L
Arsenic	ND	0.00111	"
Barium	ND	0.00111	"
Beryllium	ND	0.000333	"
Cadmium	ND	0.000556	"
Chromium	ND	0.00111	"
Copper	0.00181	0.00111	"
Lead	ND	0.00111	"
Nickel	ND	0.00111	"
Selenium	ND	0.00111	"
Silver	ND	0.00111	"
Thallium	ND	0.00111	"
Vanadium	ND	0.00111	"
Zinc	0.00237	0.00111	"

LCS (BK41663-BS1)

Prepared & Analyzed: 11/25/2024

Antimony	0.043	ug/mL	0.0500	86.1	80-120
Arsenic	0.050	"	0.0500	100	80-120
Barium	0.049	"	0.0500	97.5	80-120
Beryllium	0.049	"	0.0500	98.6	80-120
Cadmium	0.048	"	0.0500	95.2	80-120
Chromium	0.049	"	0.0500	97.5	80-120
Copper	0.051	"	0.0500	102	80-120
Lead	0.047	"	0.0500	94.1	80-120
Nickel	0.049	"	0.0500	97.2	80-120
Selenium	0.050	"	0.0500	99.5	80-120
Silver	0.042	"	0.0500	84.8	80-120
Thallium	0.048	"	0.0500	95.1	80-120
Vanadium	0.049	"	0.0500	98.1	80-120
Zinc	0.058	"	0.0500	117	80-120



Mercury by EPA 7000/200 Series Methods - Quality Control Data

York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK41680 - EPA SW846-7470A											
Blank (BK41680-BLK1)								Prepared & Analyzed: 11/25/2024			
Mercury	ND	0.0002	mg/L								
Blank (BK41680-BLK2)								Prepared & Analyzed: 11/25/2024			
Mercury	ND	0.0002	mg/L								
LCS (BK41680-BS1)								Prepared & Analyzed: 11/25/2024			
Mercury	0.0021378	0.0002	mg/L	0.00200		107	80-120				
LCS (BK41680-BS2)								Prepared & Analyzed: 11/25/2024			
Mercury	0.0020595	0.0002	mg/L	0.00200		103	80-120				



Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
24K1488-01	VHB-MW-01	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24K1488-03	MW-1R	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24K1488-04	MW-3	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24K1488-06	DUP	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
24K1488-07	Trip Blank	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



Sample and Data Qualifiers Relating to This Work Order

QL-02	This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
PFSu-H	The isotopically labeled surrogate recovered above lab control limits due to a matrix effect. Isotope Dilution was applied.
PF-LCS-L	The LCS recovery for this PFAS compound was below control limits.
PF-CCV-L	The CCV recovery for this PFAS compound was below control limits.
PF-CCV-H	The CCV recovery for this PFAS compound was above control limits.
M-CCV1	The recovery for this element in the Continuing Calibration Verification (CCV) was outside the 90-110% recovery criteria.
J	Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
ICVE20	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 20% of expected value).
ICVE	The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
CCVE	The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
B	Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.



Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

Corrective Action: Limited volume provided for sample VHB-MW-01 for PAHs and ETPH. The lab with proceed with volume provided. The VOA Vials were received frozen and cracked for sample MW-6 and VOC analysis cannot be completed. The client was notified on 11/21/24.



Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This legal document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 2161 Whitesville Rd Toms River, NJ 08755 clientservices@yorklab.com 800-306-YORK

YORK Project Number

24K1488

Page 1 of 1

Turn-Around Time

RUSH - Next Day
RUSH - Two Day
RUSH - Three Day
RUSH - Four Day
RUSH - Five Day
Standard (6-9 Day)
PFAS Standard 7-10 Day

Samples Collected From

NY CT PA Other: (please specify)

Analyses Requested

Report Type (circle)

QA Report

Summary (Results Only)

NY ASP B Package

NJ Reduced

NJ DKQP

NJ Full

G/C/GC/CT/RCP

Grab or Comp.

EDD Type (circle)

EQUS (standard)

NYSDEC EQUIS

NJDEP SRP Haz Site

Standard Excel

CMDP

Other: PDF

Regulatory Comparative

Compared to the following

Regulation(s): (please fill in)

GWPC

SWPC

Field Filtered

Lab Filtered

Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N

Custody Seals: Y (N) Containers Intact: Y (N) COC Labels Agreed: Y (N) Preservation Confirmed: Y (N)

COC Complete: Y (N) COC Received: Y (N) Appropriate Sample Volumes: Y (N) Appropriate Sample Containers: Y (N)

Cooler Temperature Confirmed: Y (N) Samples Submitted within Holding Times: Y (N) Corrective Action Form Required: Y (N)

Date/Time

11/19/24 16:00

Date/Time

11/20/24 1415

Date/Time

11/20/24 1415

Temperature

Degrees C

Invoice To:

Company: VHB

Address:

100 Great Meadows Road, Suite 200

Phone:

860-895-7458

Contact:

Pamela Lind

Email:

PLind@vhb.com

AP_CTR@vhb.com

Matrix Codes

S - soil/solid/sludge

GW - groundwater

DW - drinking water

SW - surface water

WW - wastewater

O - Oil

Other

Time

Date

11/19/24

14:00

13:50

11:45

12:55

8:50

YOUR Project Name / Number

Hempstead Park / 43340

PO Number

Preservative

(please list number of containers)

Ammonium Acetate

Trizma

Na₂S₂O₃ (sodium thio.)

NaOH (sodium hydroxide)

H₂SO₄ (sulfuric acid)

HNO₃ (nitric acid)

MeOH (methanol)

HCl (hydrochloric acid)

Unpreserved

Other: PFAS R

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Report To:

Company: VHB

Address:

100 Great Meadows Road, Suite 200

Phone:

860-895-7458

Contact:

Pamela Lind

Email:

PLind@vhb.com

AP_CTR@vhb.com

Matrix Codes

S - soil/solid/sludge

GW - groundwater

DW - drinking water

SW - surface water

WW - wastewater

O - Oil

Other

Time

Date

11/19/24

14:00

13:50

11:45

12:55

8:50

Comments:

City of New London - No t.a

* Low sample volume VHB-MW-01 (1.25 L.A + 1 PFAS PL)

1. Samples Relinquished by / Company

VHB fudge

2. Samples Received by / Company

VHB

3. Samples Relinquished by / Company

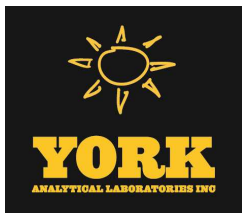
VHB

4. Samples Received by / Company

VHB

5. Samples Relinquished by / Company

VHB



Technical Report

prepared for:

VHB

100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Report Date: 11/25/2024

Client Project ID: Hempstead Park/43340

York Project (SDG) No.: 24K1499



CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037

New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 11/25/2024
Client Project ID: Hempstead Park/43340
York Project (SDG) No.: 24K1499

VHB
100 Great Meadow Road, Suite 200
Wethersfield CT, 06109
Attention: Pamela Lind

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on November 20, 2024 and listed below. The project was identified as your project: **Hempstead Park/43340**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
24K1499-01	VHB-SB-22 (0-2in)	Soil	11/19/2024	11/20/2024

General Notes for York Project (SDG) No.: 24K1499

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

Approved By:



Cassie L. Mosher
Laboratory Manager

Date: 11/25/2024





Sample Information

Client Sample ID: VHB-SB-22 (0-2in)

York Sample ID: 24K1499-01

York Project (SDG) No.

24K1499

Client Project ID

Hempstead Park/43340

Matrix

Soil

Collection Date/Time

November 19, 2024 10:00 am

Date Received

11/20/2024

Lead TCLP by EPA 6010

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A/1311

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-92-1	Lead	ND		mg/L	0.125	1	EPA 6010D/1311	11/25/2024 08:20	11/25/2024 13:48	AGNR
Certifications: CTDOH-PH-0723,NELAC-NY10854,NJDEP-CT005,PADEP-68-044										

TCLP Extraction for METALS EPA 1311

Log-in Notes:

Sample Notes: EXT-Temp

Sample Prepared by Method: EPA SW 846-1311 TCLP ext. for metals

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
	TCLP Extraction	Completed		N/A	1.00	1	EPA 1311	11/21/2024 16:35	11/22/2024 09:38	GJK
Certifications: NELAC-NY10854,CTDOH-PH-0723,NJDEP-CT005,PADEP-68-044										



Analytical Batch Summary

Batch ID: BK41496 **Preparation Method:** EPA SW 846-1311 TCLP ext. for metals **Prepared By:** JRO

YORK Sample ID	Client Sample ID	Preparation Date
24K1499-01	VHB-SB-22 (0-2in)	11/21/24
BK41496-BLK1	Blank	11/21/24

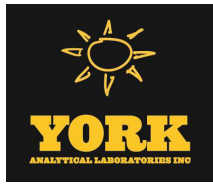
Batch ID: BK41664 **Preparation Method:** EPA 3015A/1311 **Prepared By:** DBT

YORK Sample ID	Client Sample ID	Preparation Date
24K1499-01	VHB-SB-22 (0-2in)	11/25/24
BK41664-BLK1	Blank	11/25/24
BK41664-BS1	LCS	11/25/24
BK41664-LBK1	Leach Fluid Blank	11/25/24



Metals by ICP - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BK41664 - EPA 3015A/1311											
Blank (BK41664-BLK1)								Prepared & Analyzed: 11/25/2024			
Lead	ND	0.00556	mg/L								
LCS (BK41664-BS1)								Prepared & Analyzed: 11/25/2024			
Lead	0.508		ug/mL	0.500		102	80-120				
Leach Fluid Blank (BK41664-LBK1)								Prepared & Analyzed: 11/25/2024			
Lead	ND	0.125	mg/L								



Leachate Preparations - Quality Control Data
York Analytical Laboratories, Inc. - Stratford

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC Limits	Flag	RPD Limit	Flag

Batch BK41496 - EPA SW 846-1311 TCLP ext. for metals

Blank (BK41496-BLK1)					Prepared: 11/21/2024 Analyzed: 11/22/2024				
TCLP Extraction	Completed	1.00	N/A						





Sample and Data Qualifiers Relating to This Work Order

EXT-Temp Extraction temperture slightly exceeded acceptance range.

EXT-COMP Completed

Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte .
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.





Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document. This legal document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 2161 Whitesville Rd Toms River, NJ 08755 clientservices@yorklab.com 800-306-YORK

YORK Project Number

24K1499

Page 1 of 1

Turn-Around Time

RUSH - Next Day
RUSH - Two Day
RUSH - Three Day
RUSH - Four Day
RUSH - Five Day
Standard (6-9 Day)
PFAS Standard 7-10 Day

Report Type (circle)

QA Report

Summary (Results Only)

NY ASP B Package

NJ Reduced

NJ DKQP

NJ Full

GRAB OR COMP.

EDD Type (circle)

EQUS (standard)

NYSDEC EQUIS

NJDEP SRP Haz Site

Standard Excel

CMDP

Other PDC

Regulatory Comparative

Compared to the following

Regulation(s): (please fill in)

Res DEC

GA PMC

Field Filtered

Lab Filtered

Comments:

City of New London - no fax

Lab Sample Receiving Checklist (to be completed by the receiving laboratory only) Circle Y / N

Custody Seals: Y (N) Containers Intact: Y (N) COC Labels Agree: Y (N) Preservation Confirmed: Y (N)

COC Complete: Y (N) COC Received: Y (N) Appropriate Sample Volumes: Y (N) N Appropriate Sample Containers: Y (N)

Cooler Temperature Confirmed: Y (N) N Samples Submitted within Holding Times: Y (N) N Corrective Action Form Required: Y (N)

1. Samples Relinquished to / Company Date/Time 11/19/24/16:00

2. Samples Received by / Company Date/Time 11/20/24/14:15

3. Samples Relinquished by / Company Date/Time 11/20/24/14:15

4. Samples Relinquished by / Company Date/Time 11/20/24/14:15

Samples received in LAB by Date/Time 11/20/24/14:15

Temperature 27 Degrees C

Invoice To:

Company: UHB
Address: 100 Great Meadows Road, Suite 200
Phone: 860 895 7458
Contact: Pamela Lind
Email: plind@uhb.com

YOUR Project Name / Number

Hempstead Park / 43340

PO Number

Matrix Codes
S - soil/solid/sludge
GW - groundwater
DW - drinking water
SW - surface water
WW - wastewater
O - Oil
Other
Date 11/19/24
Time 10:00
Matrix S
S 1

Preservative

(please list number of containers)

Unpreserved
HCl (hydrochloric acid)
MeOH (methanol)
HNO₃ (nitric acid)
H₂SO₄ (sulfuric acid)
NaOH (sodium hydroxide)
Na₂O₃ (sodium thio.)
Trizma
Ammonium Acetate
Other:

QC/CT RCP

QC/CT RCP

QC/CT RCP

QC/CT RCP

QC/CT RCP

QC/CT RCP

QC/CT RCP

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