

8/16/2023

Mr. Bryan Engelsen

ERM Northern Division (formerly ERM-North Central)

One Continental Towers

1701 Golf Road, Suite 1-700

Rolling Meadows IL 60008-4242

Project Name: AMEREN-TAYLORVILLE

Project #: 0693965

Workorder #: 2308161

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/9/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-13A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Joel Tillman at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Joel Tillman

Project Manager

**WORK ORDER #: 2308161**

Work Order Summary

**CLIENT:** Mr. Bryan Engelsen  
ERM Northern Division (formerly  
ERM-North Central)  
One Continental Towers  
1701 Golf Road, Suite 1-700  
Rolling Meadows, IL 60008-4242  
847-258-8991

**PHONE:**

**FAX:** 847-258-8901

**DATE RECEIVED:** 08/09/2023

**DATE COMPLETED:** 08/16/2023

**BILL TO:** Accounts Payable  
ERM Northern Division (formerly  
ERM-North Central)  
One Continental Towers  
1701 Golf Road, Suite 1-700

**P.O. #** 012633-1257

**PROJECT #** 0693965 AMEREN-TAYLORVILLE

**CONTACT:** Joel Tillman

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	20230803-0805-SAM1	Modified TO-13A
02A	20230803-0805-SAM2	Modified TO-13A
03A	20230803-0805-SAM3	Modified TO-13A
04A	20230803-0805-SAM4	Modified TO-13A
05A	20230803-0805-SAM5	Modified TO-13A
06A	20230803-0805-SAM6	Modified TO-13A
07A	Lab Blank	Modified TO-13A
08A	CCV	Modified TO-13A
08B	CCV	Modified TO-13A
09A	LCS	Modified TO-13A
09AA	LCSD	Modified TO-13A

CERTIFIED BY:   
Technical Director

DATE: 08/16/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017

Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
(916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

**LABORATORY NARRATIVE**  
**Modified TO-13A**  
**ERM Northern Division (formerly ERM-North Central)**  
**Workorder# 2308161**

Six PUF/XAD Cartridge-Low Volume samples were received on August 09, 2023. The laboratory performed the analysis for polycyclic aromatic hydrocarbons in air by modified EPA Method TO-13A. The PUF/XAD samples were extracted using Pressurized Fluid Extraction (PFE) by EPA Method 3545A. The sample extract was then concentrated to 1.0 mL and analyzed by GC/MS in the full scan mode.

To meet the quality control objectives outlined in Method TO-13A, a field blank is required for each sampling episode. If field blanks are not provided to the laboratory, any attendant risk to data quality is the responsibility of the data user.

The frequency of matrix spikes are determined by the different monitoring programs. Matrix spikes are not included in the routine calibration specifications for TO-13A.

<i>Requirement</i>	<i>TO-13A</i>	<i>ATL Modifications</i>
Initial Calibration	Calibration range: 0.1-2.5 ug/mL in Hexane	Calibration range: 1.0-500 ug/mL in Methylene chloride
Method Blank	<MDL	<Reporting limit
Surrogate Recoveries	60-120%	50-150% for Field Surrogates Fluoranthene-d10 and Benzo(a)pyrene-d12

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 07/27/2023.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- E - Exceeds instrument calibration range.
- Q - Exceeds quality control limits.
- S - Saturated peak.
- J - Estimated value.
- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
- N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Preliminary

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

**Client Sample ID: 20230803-0805-SAM1**

**Lab ID#: 2308161-01A**

No Detections Were Found.

**Client Sample ID: 20230803-0805-SAM2**

**Lab ID#: 2308161-02A**

No Detections Were Found.

**Client Sample ID: 20230803-0805-SAM3**

**Lab ID#: 2308161-03A**

No Detections Were Found.

**Client Sample ID: 20230803-0805-SAM4**

**Lab ID#: 2308161-04A**

No Detections Were Found.

**Client Sample ID: 20230803-0805-SAM5**

**Lab ID#: 2308161-05A**

No Detections Were Found.

**Client Sample ID: 20230803-0805-SAM6**

**Lab ID#: 2308161-06A**

No Detections Were Found.

Client Sample ID: 20230803-0805-SAM1

Lab ID#: 2308161-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081528	Date of Collection: 8/5/23 7:29:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 08:28 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	84	60-120
Pyrene-d10	89	60-120
Benzo(a)pyrene-d12	88	50-150
Fluoranthene-d10	86	50-150

Client Sample ID: 20230803-0805-SAM2

Lab ID#: 2308161-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081529	Date of Collection: 8/5/23 7:36:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 08:58 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	89	60-120
Pyrene-d10	87	60-120
Benzo(a)pyrene-d12	79	50-150
Fluoranthene-d10	88	50-150

Client Sample ID: 20230803-0805-SAM3

Lab ID#: 2308161-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081530	Date of Collection: 8/5/23 7:45:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 09:28 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected
Surrogates	%Recovery	Method Limits
Fluorene-d10	85	60-120
Pyrene-d10	95	60-120
Benzo(a)pyrene-d12	82	50-150
Fluoranthene-d10	85	50-150



Client Sample ID: 20230803-0805-SAM4

Lab ID#: 2308161-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081531	Date of Collection: 8/5/23 7:50:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 09:58 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	85	60-120
Pyrene-d10	90	60-120
Benzo(a)pyrene-d12	73	50-150
Fluoranthene-d10	80	50-150

Client Sample ID: 20230803-0805-SAM5

Lab ID#: 2308161-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081532	Date of Collection: 8/5/23 7:56:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 10:28 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	89	60-120
Pyrene-d10	94	60-120
Benzo(a)pyrene-d12	67	50-150
Fluoranthene-d10	85	50-150

Client Sample ID: 20230803-0805-SAM6

Lab ID#: 2308161-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081533	Date of Collection: 8/5/23 8:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 10:58 PM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected
Surrogates	%Recovery	Method Limits
Fluorene-d10	86	60-120
Pyrene-d10	86	60-120
Benzo(a)pyrene-d12	97	50-150
Fluoranthene-d10	89	50-150

Client Sample ID: Lab Blank

Lab ID#: 2308161-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081408	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/23 09:59 AM
		Date of Extraction: 8/10/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	82	60-120
Pyrene-d10	84	60-120
Benzo(a)pyrene-d12	98	50-150
Fluoranthene-d10	85	50-150

Client Sample ID: CCV

Lab ID#: 2308161-08A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081403	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/23 07:29 AM
		Date of Extraction: NA

Compound	%Recovery
Naphthalene	108
2-Methylnaphthalene	108
2-Chloronaphthalene	113
Acenaphthylene	107
Acenaphthene	105
Fluorene	106
Phenanthrene	105
Anthracene	108
Fluoranthene	110
Pyrene	106
Chrysene	105
Benzo(a)anthracene	108
Benzo(b)fluoranthene	118
Benzo(k)fluoranthene	109
Benzo(a)pyrene	108
Indeno(1,2,3-c,d)pyrene	97
Dibenz(a,h)anthracene	104
Benzo(g,h,i)perylene	103

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	107	70-130
Pyrene-d10	107	70-130
Benzo(a)pyrene-d12	110	70-130
Fluoranthene-d10	111	70-130

Client Sample ID: CCV

Lab ID#: 2308161-08B

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081526	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/15/23 07:28 PM
		Date of Extraction: NA

Compound	%Recovery
Naphthalene	99
2-Methylnaphthalene	98
2-Chloronaphthalene	101
Acenaphthylene	96
Acenaphthene	95
Fluorene	98
Phenanthrene	95
Anthracene	82
Fluoranthene	101
Pyrene	93
Chrysene	94
Benzo(a)anthracene	94
Benzo(b)fluoranthene	103
Benzo(k)fluoranthene	104
Benzo(a)pyrene	97
Indeno(1,2,3-c,d)pyrene	86
Dibenz(a,h)anthracene	95
Benzo(g,h,i)perylene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	99	70-130
Pyrene-d10	94	70-130
Benzo(a)pyrene-d12	111	70-130
Fluoranthene-d10	103	70-130

Client Sample ID: LCS

Lab ID#: 2308161-09A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081406	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/14/23 08:59 AM
		Date of Extraction:	8/10/23

Compound	%Recovery	Method Limits
Naphthalene	80	60-120
2-Methylnaphthalene	83	60-120
2-Chloronaphthalene	89	60-120
Acenaphthylene	82	60-120
Acenaphthene	79	60-120
Fluorene	85	60-120
Phenanthrene	82	60-120
Anthracene	85	60-120
Fluoranthene	87	60-120
Pyrene	82	60-120
Chrysene	82	60-120
Benzo(a)anthracene	86	60-120
Benzo(b)fluoranthene	91	60-120
Benzo(k)fluoranthene	86	60-120
Benzo(a)pyrene	86	60-120
Indeno(1,2,3-c,d)pyrene	84	60-120
Dibenz(a,h)anthracene	85	60-120
Benzo(g,h,i)perylene	85	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	88	60-120
Pyrene-d10	83	60-120
Benzo(a)pyrene-d12	106	50-150
Fluoranthene-d10	91	50-150

Client Sample ID: LCSD

Lab ID#: 2308161-09AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081407	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/23 09:29 AM
		Date of Extraction: 8/10/23

Compound	%Recovery	Method Limits
Naphthalene	73	60-120
2-Methylnaphthalene	78	60-120
2-Chloronaphthalene	86	60-120
Acenaphthylene	81	60-120
Acenaphthene	77	60-120
Fluorene	84	60-120
Phenanthrene	82	60-120
Anthracene	83	60-120
Fluoranthene	87	60-120
Pyrene	84	60-120
Chrysene	84	60-120
Benzo(a)anthracene	88	60-120
Benzo(b)fluoranthene	92	60-120
Benzo(k)fluoranthene	87	60-120
Benzo(a)pyrene	86	60-120
Indeno(1,2,3-c,d)pyrene	81	60-120
Dibenz(a,h)anthracene	83	60-120
Benzo(g,h,i)perylene	83	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	86	60-120
Pyrene-d10	85	60-120
Benzo(a)pyrene-d12	105	50-150
Fluoranthene-d10	92	50-150



8/22/2023

Mr. Bryan Engelsen

ERM Northern Division (formerly ERM-North Central)

One Continental Towers

1701 Golf Road, Suite 1-700

Rolling Meadows IL 60008-4242

Project Name: Taylorville MGP

Project #: 0693965

Workorder #: 2308241

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/11/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-13A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Joel Tillman at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Joel Tillman

Project Manager

**WORK ORDER #: 2308241**

Work Order Summary

<b>CLIENT:</b>	Mr. Bryan Engelsen ERM Northern Division (formerly ERM-North Central) One Continental Towers 1701 Golf Road, Suite 1-700 Rolling Meadows, IL 60008-4242 847-258-8991	<b>BILL TO:</b>	Accounts Payable ERM Northern Division (formerly ERM-North Central) One Continental Towers 1701 Golf Road, Suite 1-700
<b>PHONE:</b>		<b>P.O. #</b>	012633-1257
<b>FAX:</b>	847-258-8901	<b>PROJECT #</b>	0693965 Taylorville MGP
<b>DATE RECEIVED:</b>	08/11/2023	<b>CONTACT:</b>	Joel Tillman
<b>DATE COMPLETED:</b>	08/22/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	20230807-0810-SAM1	Modified TO-13A
02A	20230807-0810-SAM2	Modified TO-13A
03A	20230807-0810-SAM3	Modified TO-13A
04A	20230807-0810-SAM4	Modified TO-13A
05A	20230807-0810-SAM5	Modified TO-13A
06A	20230807-0810-SAM6	Modified TO-13A
07A	Lab Blank	Modified TO-13A
08A	CCV	Modified TO-13A
09A	LCS	Modified TO-13A
09AA	LCSD	Modified TO-13A

CERTIFIED BY:   
 Technical Director

DATE: 08/22/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017  
 Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

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**LABORATORY NARRATIVE**  
**Modified TO-13A**  
**ERM Northern Division (formerly ERM-North Central)**  
**Workorder# 2308241**

Six PUF/XAD Cartridge-Low Volume samples were received on August 11, 2023. The laboratory performed the analysis for polycyclic aromatic hydrocarbons in air by modified EPA Method TO-13A. The PUF/XAD samples were extracted using Pressurized Fluid Extraction (PFE) by EPA Method 3545A. The sample extract was then concentrated to 1.0 mL and analyzed by GC/MS in the full scan mode.

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The frequency of matrix spikes are determined by the different monitoring programs. Matrix spikes are not included in the routine calibration specifications for TO-13A.

<i>Requirement</i>	<i>TO-13A</i>	<i>ATL Modifications</i>
Initial Calibration	Calibration range: 0.1-2.5 ug/mL in Hexane	Calibration range: 1.0-500 ug/mL in Methylene chloride
Method Blank	<MDL	<Reporting limit
Surrogate Recoveries	60-120%	50-150% for Field Surrogates Fluoranthene-d10 and Benzo(a)pyrene-d12

**Receiving Notes**

The Chain of Custody was missing method information. EATL proceeded with the analysis as per the original contract or verbal agreement.

**Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 07/27/2023.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- E - Exceeds instrument calibration range.
- Q - Exceeds quality control limits.
- S - Saturated peak.
- J - Estimated value.
- B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
- U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
- N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates

as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Preliminary

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

**Client Sample ID: 20230807-0810-SAM1**

**Lab ID#: 2308241-01A**

No Detections Were Found.

**Client Sample ID: 20230807-0810-SAM2**

**Lab ID#: 2308241-02A**

No Detections Were Found.

**Client Sample ID: 20230807-0810-SAM3**

**Lab ID#: 2308241-03A**

No Detections Were Found.

**Client Sample ID: 20230807-0810-SAM4**

**Lab ID#: 2308241-04A**

No Detections Were Found.

**Client Sample ID: 20230807-0810-SAM5**

**Lab ID#: 2308241-05A**

No Detections Were Found.

**Client Sample ID: 20230807-0810-SAM6**

**Lab ID#: 2308241-06A**

No Detections Were Found.

Client Sample ID: 20230807-0810-SAM1

Lab ID#: 2308241-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081508	Date of Collection: 8/10/23 7:51:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 10:40 AM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	83	60-120
Pyrene-d10	91	60-120
Benzo(a)pyrene-d12	92	50-150
Fluoranthene-d10	84	50-150

Client Sample ID: 20230807-0810-SAM2

Lab ID#: 2308241-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081509	Date of Collection: 8/10/23 8:02:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 11:10 AM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	92	60-120
Pyrene-d10	89	60-120
Benzo(a)pyrene-d12	91	50-150
Fluoranthene-d10	89	50-150

Client Sample ID: 20230807-0810-SAM3

Lab ID#: 2308241-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081510	Date of Collection: 8/10/23 8:10:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 11:40 AM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	90	60-120
Pyrene-d10	94	60-120
Benzo(a)pyrene-d12	81	50-150
Fluoranthene-d10	86	50-150



Client Sample ID: 20230807-0810-SAM4

Lab ID#: 2308241-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081511	Date of Collection: 8/10/23 8:15:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 12:10 PM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	88	60-120
Pyrene-d10	97	60-120
Benzo(a)pyrene-d12	90	50-150
Fluoranthene-d10	87	50-150

Client Sample ID: 20230807-0810-SAM5

Lab ID#: 2308241-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081512	Date of Collection: 8/10/23 8:24:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 12:40 PM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected
Surrogates	%Recovery	Method Limits
Fluorene-d10	89	60-120
Pyrene-d10	100	60-120
Benzo(a)pyrene-d12	83	50-150
Fluoranthene-d10	84	50-150

Client Sample ID: 20230807-0810-SAM6

Lab ID#: 2308241-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081513	Date of Collection: 8/10/23 8:30:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/15/23 01:10 PM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected
Surrogates	%Recovery	Method Limits
Fluorene-d10	85	60-120
Pyrene-d10	82	60-120
Benzo(a)pyrene-d12	98	50-150
Fluoranthene-d10	91	50-150

Client Sample ID: Lab Blank

Lab ID#: 2308241-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081506	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/15/23 09:40 AM
		Date of Extraction: 8/14/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	88	60-120
Pyrene-d10	90	60-120
Benzo(a)pyrene-d12	103	50-150
Fluoranthene-d10	85	50-150

Client Sample ID: CCV

Lab ID#: 2308241-08A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081503	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/15/23 08:06 AM
		Date of Extraction: NA

Compound	%Recovery
Naphthalene	100
2-Methylnaphthalene	97
2-Chloronaphthalene	105
Acenaphthylene	99
Acenaphthene	97
Fluorene	99
Phenanthrene	97
Anthracene	86
Fluoranthene	105
Pyrene	96
Chrysene	98
Benzo(a)anthracene	97
Benzo(b)fluoranthene	105
Benzo(k)fluoranthene	104
Benzo(a)pyrene	99
Indeno(1,2,3-c,d)pyrene	86
Dibenz(a,h)anthracene	96
Benzo(g,h,i)perylene	94

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	101	70-130
Pyrene-d10	96	70-130
Benzo(a)pyrene-d12	114	70-130
Fluoranthene-d10	105	70-130

Client Sample ID: LCS

Lab ID#: 2308241-09A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081504	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/15/23 08:40 AM
		Date of Extraction: 8/14/23

Compound	%Recovery	Method Limits
Naphthalene	68	60-120
2-Methylnaphthalene	74	60-120
2-Chloronaphthalene	81	60-120
Acenaphthylene	75	60-120
Acenaphthene	72	60-120
Fluorene	80	60-120
Phenanthrene	78	60-120
Anthracene	82	60-120
Fluoranthene	85	60-120
Pyrene	85	60-120
Chrysene	81	60-120
Benzo(a)anthracene	85	60-120
Benzo(b)fluoranthene	94	60-120
Benzo(k)fluoranthene	87	60-120
Benzo(a)pyrene	84	60-120
Indeno(1,2,3-c,d)pyrene	68	60-120
Dibenz(a,h)anthracene	81	60-120
Benzo(g,h,i)perylene	81	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	83	60-120
Pyrene-d10	86	60-120
Benzo(a)pyrene-d12	86	50-150
Fluoranthene-d10	73	50-150

Client Sample ID: LCSD

Lab ID#: 2308241-09AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081505	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/15/23 09:10 AM
		Date of Extraction: 8/14/23

Compound	%Recovery	Method Limits
Naphthalene	72	60-120
2-Methylnaphthalene	78	60-120
2-Chloronaphthalene	84	60-120
Acenaphthylene	78	60-120
Acenaphthene	76	60-120
Fluorene	83	60-120
Phenanthrene	82	60-120
Anthracene	84	60-120
Fluoranthene	85	60-120
Pyrene	93	60-120
Chrysene	84	60-120
Benzo(a)anthracene	88	60-120
Benzo(b)fluoranthene	92	60-120
Benzo(k)fluoranthene	93	60-120
Benzo(a)pyrene	87	60-120
Indeno(1,2,3-c,d)pyrene	72	60-120
Dibenz(a,h)anthracene	85	60-120
Benzo(g,h,i)perylene	86	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	84	60-120
Pyrene-d10	94	60-120
Benzo(a)pyrene-d12	102	50-150
Fluoranthene-d10	83	50-150

8/22/2023

Mr. Bryan Engelsen

ERM Northern Division (formerly ERM-North Central)

One Continental Towers

1701 Golf Road, Suite 1-700

Rolling Meadows IL 60008-4242

Project Name: Taylorville MGP

Project #: 0693965

Workorder #: 2308271

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/14/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified TO-13A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Joel Tillman at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Joel Tillman

Project Manager



**WORK ORDER #: 2308271**

Work Order Summary

<b>CLIENT:</b>	Mr. Bryan Engelsen ERM Northern Division (formerly ERM-North Central) One Continental Towers 1701 Golf Road, Suite 1-700 Rolling Meadows, IL 60008-4242 847-258-8991	<b>BILL TO:</b>	Accounts Payable ERM Northern Division (formerly ERM-North Central) One Continental Towers 1701 Golf Road, Suite 1-700
<b>PHONE:</b>		<b>P.O. #</b>	012633-1257
<b>FAX:</b>	847-258-8901	<b>PROJECT #</b>	0693965 Taylorville MGP
<b>DATE RECEIVED:</b>	08/14/2023	<b>CONTACT:</b>	Joel Tillman
<b>DATE COMPLETED:</b>	08/22/2023		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	20230810-0812-SAM1	Modified TO-13A
02A	20230810-0812-SAM2	Modified TO-13A
03A	20230810-0812-SAM3	Modified TO-13A
04A	20230810-0812-SAM4	Modified TO-13A
05A	20230810-0812-SAM5	Modified TO-13A
06A	20230810-0812-SAM6	Modified TO-13A
07A	Lab Blank	Modified TO-13A
08A	CCV	Modified TO-13A
09A	LCS	Modified TO-13A
09AA	LCSD	Modified TO-13A

CERTIFIED BY:   
 Technical Director

DATE: 08/22/23

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017  
 Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

*This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, LLC.*  
 180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 351-8279

**LABORATORY NARRATIVE**  
**Modified TO-13A**  
**ERM Northern Division (formerly ERM-North Central)**  
**Workorder# 2308271**

Six PUF/XAD Cartridge-Low Volume samples were received on August 14, 2023. The laboratory performed the analysis for polycyclic aromatic hydrocarbons in air by modified EPA Method TO-13A. The PUF/XAD samples were extracted using Pressurized Fluid Extraction (PFE) by EPA Method 3545A. The sample extract was then concentrated to 1.0 mL and analyzed by GC/MS in the full scan mode.

To meet the quality control objectives outlined in Method TO-13A, a field blank is required for each sampling episode. If field blanks are not provided to the laboratory, any attendant risk to data quality is the responsibility of the data user.

The frequency of matrix spikes are determined by the different monitoring programs. Matrix spikes are not included in the routine calibration specifications for TO-13A.

<i>Requirement</i>	<i>TO-13A</i>	<i>ATL Modifications</i>
Initial Calibration	Calibration range: 0.1-2.5 ug/mL in Hexane	Calibration range: 1.0-500 ug/mL in Methylene chloride
Method Blank	<MDL	<Reporting limit
Surrogate Recoveries	60-120%	50-150% for Field Surrogates Fluoranthene-d10 and Benzo(a)pyrene-d12

**Receiving Notes**

A Temperature Blank was included with the shipment. Temperature was measured and was not within  $4 \pm 2$  °C. Coolant in the form of blue ice was present. Analysis proceeded.

**Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 08/04/2023.

**Definition of Data Qualifying Flags**

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

E - Exceeds instrument calibration range.

Q - Exceeds quality control limits.

S - Saturated peak.

J - Estimated value.

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Preliminary

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN**

**Client Sample ID: 20230810-0812-SAM1**

**Lab ID#: 2308271-01A**

No Detections Were Found.

**Client Sample ID: 20230810-0812-SAM2**

**Lab ID#: 2308271-02A**

No Detections Were Found.

**Client Sample ID: 20230810-0812-SAM3**

**Lab ID#: 2308271-03A**

No Detections Were Found.

**Client Sample ID: 20230810-0812-SAM4**

**Lab ID#: 2308271-04A**

No Detections Were Found.

**Client Sample ID: 20230810-0812-SAM5**

**Lab ID#: 2308271-05A**

No Detections Were Found.

**Client Sample ID: 20230810-0812-SAM6**

**Lab ID#: 2308271-06A**

No Detections Were Found.

Client Sample ID: 20230810-0812-SAM1

Lab ID#: 2308271-01A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081712	Date of Collection: 8/12/23 2:31:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 01:08 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	82	60-120
Pyrene-d10	84	60-120
Benzo(a)pyrene-d12	87	50-150
Fluoranthene-d10	82	50-150

Client Sample ID: 20230810-0812-SAM2

Lab ID#: 2308271-02A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081713	Date of Collection: 8/12/23 2:37:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 01:38 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	85	60-120
Pyrene-d10	99	60-120
Benzo(a)pyrene-d12	85	50-150
Fluoranthene-d10	80	50-150

Client Sample ID: 20230810-0812-SAM3

Lab ID#: 2308271-03A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081714	Date of Collection: 8/12/23 2:39:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 02:08 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	80	60-120
Pyrene-d10	97	60-120
Benzo(a)pyrene-d12	81	50-150
Fluoranthene-d10	75	50-150

Client Sample ID: 20230810-0812-SAM4

Lab ID#: 2308271-04A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081715	Date of Collection: 8/12/23 2:42:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 02:38 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	84	60-120
Pyrene-d10	86	60-120
Benzo(a)pyrene-d12	76	50-150
Fluoranthene-d10	82	50-150



Client Sample ID: 20230810-0812-SAM5

Lab ID#: 2308271-05A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081716	Date of Collection: 8/12/23 2:50:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 03:08 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	85	60-120
Pyrene-d10	77	60-120
Benzo(a)pyrene-d12	89	50-150
Fluoranthene-d10	88	50-150

Client Sample ID: 20230810-0812-SAM6

Lab ID#: 2308271-06A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081717	Date of Collection: 8/12/23 2:55:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/17/23 03:38 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected

Surrogates	%Recovery	Method Limits
Fluorene-d10	90	60-120
Pyrene-d10	74	60-120
Benzo(a)pyrene-d12	102	50-150
Fluoranthene-d10	102	50-150

Client Sample ID: Lab Blank

Lab ID#: 2308271-07A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081711	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/23 12:37 PM
		Date of Extraction: 8/17/23

Compound	Rpt. Limit (ug)	Amount (ug)
Naphthalene	1.0	Not Detected
2-Methylnaphthalene	1.0	Not Detected
2-Chloronaphthalene	1.0	Not Detected
Acenaphthylene	1.0	Not Detected
Acenaphthene	1.0	Not Detected
Fluorene	1.0	Not Detected
Phenanthrene	1.0	Not Detected
Anthracene	1.0	Not Detected
Fluoranthene	1.0	Not Detected
Pyrene	1.0	Not Detected
Chrysene	1.0	Not Detected
Benzo(a)anthracene	1.0	Not Detected
Benzo(b)fluoranthene	1.0	Not Detected
Benzo(k)fluoranthene	1.0	Not Detected
Benzo(a)pyrene	1.0	Not Detected
Indeno(1,2,3-c,d)pyrene	1.0	Not Detected
Dibenz(a,h)anthracene	1.0	Not Detected
Benzo(g,h,i)perylene	1.0	Not Detected
Surrogates	%Recovery	Method Limits
Fluorene-d10	86	60-120
Pyrene-d10	72	60-120
Benzo(a)pyrene-d12	95	50-150
Fluoranthene-d10	90	50-150

Client Sample ID: CCV

Lab ID#: 2308271-08A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081703	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/23 08:36 AM
		Date of Extraction: NA

Compound	%Recovery
Naphthalene	96
2-Methylnaphthalene	96
2-Chloronaphthalene	99
Acenaphthylene	95
Acenaphthene	93
Fluorene	96
Phenanthrene	92
Anthracene	80
Fluoranthene	100
Pyrene	91
Chrysene	93
Benzo(a)anthracene	93
Benzo(b)fluoranthene	99
Benzo(k)fluoranthene	100
Benzo(a)pyrene	96
Indeno(1,2,3-c,d)pyrene	97
Dibenz(a,h)anthracene	99
Benzo(g,h,i)perylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	97	70-130
Pyrene-d10	90	70-130
Benzo(a)pyrene-d12	109	70-130
Fluoranthene-d10	101	70-130

Client Sample ID: LCS

Lab ID#: 2308271-09A

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081709	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/23 11:37 AM
		Date of Extraction: 8/17/23

Compound	%Recovery	Method Limits
Naphthalene	76	60-120
2-Methylnaphthalene	80	60-120
2-Chloronaphthalene	87	60-120
Acenaphthylene	81	60-120
Acenaphthene	77	60-120
Fluorene	86	60-120
Phenanthrene	84	60-120
Anthracene	85	60-120
Fluoranthene	90	60-120
Pyrene	88	60-120
Chrysene	84	60-120
Benzo(a)anthracene	89	60-120
Benzo(b)fluoranthene	94	60-120
Benzo(k)fluoranthene	90	60-120
Benzo(a)pyrene	87	60-120
Indeno(1,2,3-c,d)pyrene	74	60-120
Dibenz(a,h)anthracene	85	60-120
Benzo(g,h,i)perylene	85	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	88	60-120
Pyrene-d10	88	60-120
Benzo(a)pyrene-d12	103	50-150
Fluoranthene-d10	87	50-150

Client Sample ID: LCSD

Lab ID#: 2308271-09AA

MODIFIED EPA METHOD TO-13A GC/MS FULL SCAN

File Name:	12081710	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/17/23 12:07 PM
		Date of Extraction: 8/17/23

Compound	%Recovery	Method Limits
Naphthalene	70	60-120
2-Methylnaphthalene	77	60-120
2-Chloronaphthalene	82	60-120
Acenaphthylene	74	60-120
Acenaphthene	71	60-120
Fluorene	80	60-120
Phenanthrene	77	60-120
Anthracene	78	60-120
Fluoranthene	83	60-120
Pyrene	78	60-120
Chrysene	78	60-120
Benzo(a)anthracene	81	60-120
Benzo(b)fluoranthene	87	60-120
Benzo(k)fluoranthene	83	60-120
Benzo(a)pyrene	81	60-120
Indeno(1,2,3-c,d)pyrene	74	60-120
Dibenz(a,h)anthracene	79	60-120
Benzo(g,h,i)perylene	79	60-120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorene-d10	82	60-120
Pyrene-d10	79	60-120
Benzo(a)pyrene-d12	96	50-150
Fluoranthene-d10	81	50-150