

8/29/2023

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 #: 2308322

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/16/2023 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by EPA Method 325B 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 #: 2308322**

Work Order Summary

CLIENT: Mr. Bryan Engelsen BILL TO: Accounts Payable

ERM Northern Division (formerly ERM Northern Division (formerly

ERM-North Central)
One Continental Towers
One Continental Towers
1701 Golf Road, Suite 1-700
1701 Golf Road, Suite 1-700

PHONE: Rolling Meadows, IL 60008-4242 847-258-8991 P.O.# 012633-1257

**FAX:** 847-258-8901 **PROJECT** # 0693965 Taylorville MGP

DATE RECEIVED: 08/16/2023 CONTACT: Joel Tillman 08/29/2023

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	20230731-0814-SAM1	EPA Method 325B
02A	20230731-0814-SAM2	EPA Method 325B
03A	20230731-0814-SAM3	EPA Method 325B
04A	20230731-0814-SAM4	EPA Method 325B
05A	20230731-0814-SAM5	EPA Method 325B
06A	20230731-0814-SAM6	EPA Method 325B
07A	Lab Blank	EPA Method 325B
08A	CCV	EPA Method 325B
08B	CCV	EPA Method 325B
08C	CCV	EPA Method 325B

	Ju	eac jugo	08/29/23	
CERTIFIED BY:			DATE: OG/25/25	
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Technical Director

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 ATM EPA 325B ERM Northern Division (formerly ERM-North Central) Workorder# 2308322

Six Carbopack X ERM samples were received on August 16, 2023. The laboratory performed the analysis via EPA Method 325B using GC/MS in the full scan mode.

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the uptake rate for each VOC. Uptake rates are adjusted for local conditions and concentrations are reported based on normal ambient temperature and pressure conditions (25 deg C and 760 mm Hg) following the required calculations in EPA Method 325B. These adjustments are reflected in the dilution factor.

#### **Receiving Notes**

The Chain of Custody (COC) information for sample 20230731-0814-SAM6 did not match the information on the tube with regard to tube identification/barcode. The sample labeled 1181163 on the COC is labeled as 1181663 on the tube. Unless otherwise notified, Eurofins Air Toxics will proceed with the analysis using the information on the tube to process and report the sample.

#### **Analytical Notes**

The sample concentrations for Toluene in the field duplicate pair 20230731-0814-SAM5 and 20230731-0814-SAM4 were just above and below the method detection limit (MDL), respectively. In order to evaluate field precision against method criterion of </=30%RPD, the %RPD was calculated using the MDL value for sample 20230731-0814-SAM4. No data qualifier flags were applied to the data set.

#### **Definition of Data Qualifying Flags**

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

- B Compound present in field blank(s) greater than 1/3 the compliance limit or measured target analyte (background subtraction not performed).
  - J Estimated value analyte detected between the Method Detection Limit and Reporting Limit.
  - E Exceeds instrument calibration range.
  - S Saturated peak.
  - Q Exceeds quality control limits.
  - U Compound analyzed for but not detected above the MDL value.
  - I Internal Standard recovery outside acceptance limits
  - P Field Duplicate(s) exceed 30% RPD
- Pc- Field Duplicate(s) exceed 30% RPD, concentrations of sample and/or its duplicate less than 2 times reporting limit.
  - Pl Field Duplicate(s) exceed 30% RPD, lab anomaly noted.
  - L Recovery of bracketing CCV(s) exceeded acceptance limits.
  - H Sample analyzed outside of method hold time.
  - D Sample duration outside 14+/-1 days
  - Fe Field Error or discrepancy
  - Te Tube Error or discrepancy
  - CN See case narrative explanation.



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



# **Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN**

Client Sample ID: 20230731-0814-SAM1

Lab ID#: 2308322-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.29 J
Toluene	0.48	0.26 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

**Client Sample ID: 20230731-0814-SAM2** 

Lab ID#: 2308322-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.37
Toluene	0.48	0.47 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

Client Sample ID: 20230731-0814-SAM3

Lab ID#: 2308322-03A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.28 J
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

Client Sample ID: 20230731-0814-SAM4

Lab ID#: 2308322-04A



# **Summary of Detected Compounds EPA METHOD 325B GC/MS FULL SCAN**

Client Sample ID: 20230731-0814-SAM4

Lab ID#: 2308322-04A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.31 J
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

**Client Sample ID: 20230731-0814-SAM5** 

Lab ID#: 2308322-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.35 J
Toluene	0.48	0.28 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

Client Sample ID: 20230731-0814-SAM6

Lab ID#: 2308322-06A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.18 U
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U



# Lab ID#: 2308322-01A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: Date of Collection: 8/14/23 12:10:00 PM f082225 Dil. Factor: Date of Analysis: 8/22/23 09:38 PM 1.00 Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.29 J
Toluene	0.48	0.26 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

 $<sup>\</sup>mbox{U} = \mbox{The analyte was not present above the Method Detection Limit.}$   $\mbox{J} = \mbox{Estimated value}.$ 



Lab ID#: 2308322-02A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082227 Date of Collection: 8/14/23 12:15:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/22/23 10:37 PM
Date of Extraction: NA

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.37
Toluene	0.48	0.47 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xvlene	0.54	0.27 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.



Lab ID#: 2308322-03A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082228 Date of Collection: 8/14/23 12:17:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/22/23 11:08 PM
Date of Extraction: NA

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.28 J
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.



Lab ID#: 2308322-04A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082229 Date of Collection: 8/14/23 12:18:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/22/23 11:38 PM
Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.31 J
Toluene	0.48	0.24 U
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 Ū

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.



Lab ID#: 2308322-05A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082230 Date of Collection: 8/14/23 12:19:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/23/23 12:09 AM
Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.35 J
Toluene	0.48	0.28 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xylene	0.54	0.27 U

U = The analyte was not present above the Method Detection Limit.

J = Estimated value.



Lab ID#: 2308322-06A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082224 Date of Collection: 8/14/23 12:25:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/22/23 09:07 PM
Date of Extraction: NA

	Rpt. Limit	Amount	
Compound	(ug/m3)	(ug/m3)	
Styrene	0.50	0.20 U	
Benzene	0.37	0.18 U	
Toluene	0.48	0.24 U	
Ethyl Benzene	0.54	0.27 U	
m,p-Xylene	0.54	0.27 U	
o-Xylene	0.54	0.27 U	

U = The analyte was not present above the Method Detection Limit.



#### Client Sample ID: Lab Blank Lab ID#: 2308322-07A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082204 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/22/23 10:40 AM
Date of Extraction: NA

Rpt. Limit Amount Compound (ug/m3) (ug/m3) 0.20 U 0.50 Styrene 0.37 0.18 U Benzene 0.48 0.24 U Toluene Ethyl Benzene 0.54 0.27 U 0.54 0.27 U m,p-Xylene

0.54

0.27 Ū

 $\ensuremath{\mathsf{U}}$  = The analyte was not present above the Method Detection Limit.

**Container Type: NA - Not Applicable** 

o-Xylene



#### Client Sample ID: CCV Lab ID#: 2308322-08A

#### EPA METHOD 325B GC/MS FULL SCAN

File Name: f082215 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/22/23 04:31 PM
Date of Extraction: NA

Compound	%Recovery	
Styrene	102	
Benzene	90	
Toluene	106	
Ethyl Benzene	108	
m,p-Xylene	107	
o-Xylene	105	



#### Client Sample ID: CCV Lab ID#: 2308322-08B

#### EPA METHOD 325B GC/MS FULL SCAN

	******	
File Name:	f082226	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/22/23 10:06 PM
		Date of Extraction: MA

Compound	%Recovery
Styrene	112
Benzene	85
Toluene	105
Ethyl Benzene	109
m,p-Xylene	112
o-Xylene	113



#### Client Sample ID: CCV Lab ID#: 2308322-08C

#### EPA METHOD 325B GC/MS FULL SCAN

File Name:	f082237	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/23/23 03:24 AM
		Date of Extraction: NA

Compound	%Recovery	
Styrene	91	
Benzene	87	
Toluene	102	
Ethyl Benzene	95	
m,p-Xylene	94	
o-Xylene	91	



8/24/2023

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 #: 2308457

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/22/2023 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 #: 2308457**

Work Order Summary

CLIENT: Mr. Bryan Engelsen BILL TO: Accounts Payable

ERM Northern Division (formerly ERM Northern Division (formerly

ERM-North Central)
One Continental Towers
1701 Golf Road, Suite 1-700

ERM-North Central)
One Continental Towers
1701 Golf Road, Suite 1-700

PHONE: Rolling Meadows, IL 60008-4242 847-258-8991 P.O.# 012633-1257

**FAX:** 847-258-8901 **PROJECT** # 0693965 Taylorville MGP

DATE RECEIVED: 08/22/2023

DATE COMPLETED: 08/24/2023

CONTACT: Joel Tillman

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	20230814-0817-SAM1	Modified TO-13A
02A	20230814-0817-SAM2	Modified TO-13A
03A	20230814-0817-SAM3	Modified TO-13A
04A	20230814-0817-SAM4	Modified TO-13A
05A	20230814-0817-SAM5	Modified TO-13A
06A	20230814-0817-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

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CERTIFIED BY:			DATE: $\frac{08/24/23}{}$

Technical Director

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# 2308457

Six PUF/XAD Cartridge-Low Volume samples were received on August 22, 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.

Requirement	TO-13A	ATL Modifications
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< th=""><th><reporting limit<="" th=""></reporting></th></mdl<>	<reporting limit<="" th=""></reporting>
Surrogate Recoveries	60-120%	50-150% for Field Surrogates Fluoranthene-d10 and Benzo(a)pyrene-d12

#### **Receiving Notes**

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within  $4\pm2$  °C. Coolant in the form of blue ice was present. Analysis proceeded.

The custody seals arrived broken and analysis proceeded.

#### **Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 08/10/2023.

#### **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



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

Client Sample ID: 20230814-0817-SAM1

Lab ID#: 2308457-01A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	2.6

Client Sample ID: 20230814-0817-SAM2

Lab ID#: 2308457-02A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	7.6
2-Methylnaphthalene	1.0	2.0

Client Sample ID: 20230814-0817-SAM3

Lab ID#: 2308457-03A
No Detections Were Found.

Client Sample ID: 20230814-0817-SAM4

Lab ID#: 2308457-04A
No Detections Were Found.

Client Sample ID: 20230814-0817-SAM5

Lab ID#: 2308457-05A
No Detections Were Found.

Client Sample ID: 20230814-0817-SAM6

Lab ID#: 2308457-06A
No Detections Were Found.



### Lab ID#: 2308457-01A

File Name:	12082307	Date of Collection: 8/17/23 9:33:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/23/23 11:53 AM
		Date of Extraction: 8/23/23

Z 40.0	1.00 Date of Allarysi	3. 0/20/20 11.00 AM
	Date of Extract	ion: 8/23/23
	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	2.6
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
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	88	60-120
Pyrene-d10	84	60-120
Benzo(a)pyrene-d12	87	50-150
Fluoranthene-d10	84	50-150



Lab ID#: 2308457-02A

File Name:	12082308	Date of Collection: 8/17/23 9:42:00 AM
Dil. Factor:	1.00	Date of Analysis: 8/23/23 12:23 PM
		Date of Extraction: 8/23/23

	Date of Extra	Date of Extraction: 8/23/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	7.6	
2-Methylnaphthalene	1.0	2.0	
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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	88	60-120	
Pyrene-d10	76	60-120	
Benzo(a)pyrene-d12	71	50-150	
Fluoranthene-d10	84	50-150	



#### Lab ID#: 2308457-03A

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

File Name: 12082309 Date of Collection: 8/17/23 9:47:00 AM
Dil. Factor: 1.00 Date of Analysis: 8/23/23 12:53 PM
Date of Extraction: 8/23/23

	1.00 Date of Analys	13. 0/20/20 12.00 1 W
	Date of Extract	ion: 8/23/23
	Rpt. Limit	Amount
Compound	(ug)	(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
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	85	60-120
Pyrene-d10	87	60-120
Benzo(a)pyrene-d12	80	50-150
Fluoranthene-d10	79	50-150



Lab ID#: 2308457-04A

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

File Name: Date of Collection: 8/17/23 9:52:00 AM 12082310 Dil. Factor: Date of Analysis: 8/23/23 01:23 PM 1.00

	Date of Extra	Date of Extraction: 8/23/23	
	Rpt. Limit	Amount	
Compound	(ug)	(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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	85	60-120	
Pyrene-d10	91	60-120	
Benzo(a)pyrene-d12	72	50-150	
Fluoranthene-d10	77	50-150	



Lab ID#: 2308457-05A

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

File Name: Date of Collection: 8/17/23 9:55:00 AM 12082311 Dil. Factor: Date of Analysis: 8/23/23 01:53 PM 1.00

	Date of Extra	Date of Extraction: 8/23/23	
	Rpt. Limit	Amount	
Compound	(ug)	(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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	85	60-120	
Pyrene-d10	81	60-120	
Benzo(a)pyrene-d12	75	50-150	
Fluoranthene-d10	82	50-150	



Lab ID#: 2308457-06A

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

File Name: 12082312 Date of Collection: 8/17/23 10:00:00 AM Date of Analysis: 8/23/23 02:23 PM

	Date of Extraction: 8/23/23	
	Rpt. Limit	Amount
Compound	(ug)	(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
	The state of the s	Method
Surrogates	%Recovery	Limits
Fluorene-d10	84	60-120
Pyrene-d10	76	60-120
Benzo(a)pyrene-d12	90	50-150
Fluoranthene-d10	87	50-150



#### Client Sample ID: Lab Blank Lab ID#: 2308457-07A

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

File Name: 12082306 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/23/23 11:23 AM

	Date of Extraction: 8/23/23	
	Rpt. Limit	Amount
Compound	(ug)	(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
	, in the second second	Method
Surrogates	%Recovery	Limits
Fluorene-d10	83	60-120
Pyrene-d10	84	60-120
Benzo(a)pyrene-d12	89	50-150
Fluoranthene-d10	77	50-150



#### Client Sample ID: CCV Lab ID#: 2308457-08A

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

File Name: 12082303 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/23/

Date of Analysis: 8/23/23 09:52 AM

Date of Extraction: NA

Compound	%Recovery	
Naphthalene	90	
2-Methylnaphthalene	91	
2-Chloronaphthalene	95	
Acenaphthylene	90	
Acenaphthene	88	
Fluorene	91	
Phenanthrene	88	
Anthracene	74	
Fluoranthene	93	
Pyrene	90	
Chrysene	88	
Benzo(a)anthracene	87	
Benzo(b)fluoranthene	96	
Benzo(k)fluoranthene	96	
Benzo(a)pyrene	92	
Indeno(1,2,3-c,d)pyrene	83	
Dibenz(a,h)anthracene	90	
Benzo(g,h,i)perylene	94	

		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	91	70-130	
Pyrene-d10	89	70-130	
Benzo(a)pyrene-d12	105	70-130	
Fluoranthene-d10	95	70-130	



#### **Client Sample ID: LCS** Lab ID#: 2308457-09A

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

File Name: 12082304 **Date of Collection: NA** Dil. Factor: 1.00

Date of Analysis: 8/23/23 10:23 AM

Date of Extraction: 8/23/23

	Date of Extraction. 6/25/25	
Compound	%Recovery	Method Limits
Naphthalene	64	60-120
•	72	60-120
2-Methylnaphthalene	76	60-120
2-Chloronaphthalene	70	60-120
Acenaphthylene	69	60-120
Acenaphthene		
Fluorene	76	60-120
Phenanthrene	74	60-120
Anthracene	75	60-120
Fluoranthene	79	60-120
Pyrene	81	60-120
Chrysene	78	60-120
Benzo(a)anthracene	79	60-120
Benzo(b)fluoranthene	82	60-120
Benzo(k)fluoranthene	79	60-120
Benzo(a)pyrene	79	60-120
Indeno(1,2,3-c,d)pyrene	73	60-120
Dibenz(a,h)anthracene	78	60-120
Benzo(g,h,i)perylene	80	60-120
Container Type: NA - Not Applicable		
	<u> </u>	Method
Surrogates	%Recovery	Limits
Fluorene-d10	79	60-120
Pyrene-d10	82	60-120
Benzo(a)pyrene-d12	89	50-150
Fluoranthene-d10	76	50-150



#### **Client Sample ID: LCSD** Lab ID#: 2308457-09AA

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

File Name: 12082305 **Date of Collection: NA** Dil. Factor: 1.00

Date of Analysis: 8/23/23 10:53 AM

Date of Extraction: 8/23/23

	Date of Extract	IOII. GIZGIZG
Compound	%Recovery	Method Limits
Naphthalene	66	60-120
2-Methylnaphthalene	72	60-120
2-Chloronaphthalene	78	60-120
Acenaphthylene	70	60-120
Acenaphthene	67	60-120
Fluorene	75	60-120
Phenanthrene	72	60-120
Anthracene	74	60-120
Fluoranthene	78	60-120
Pyrene	79	60-120
Chrysene	76	60-120
Benzo(a)anthracene	76	60-120
Benzo(b)fluoranthene	85	60-120
Benzo(k)fluoranthene	76	60-120
Benzo(a)pyrene	77	60-120
Indeno(1,2,3-c,d)pyrene	65	60-120
Dibenz(a,h)anthracene	74	60-120
Benzo(g,h,i)perylene	75	60-120
Container Type: NA - Not Applicable		
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	78	60-120
Pyrene-d10	81	60-120
Benzo(a)pyrene-d12	88	50-150
Fluoranthene-d10	74	50-150



8/28/2023

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 #: 2308458

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/22/2023 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 #: 2308458**

Work Order Summary

CLIENT: Mr. Bryan Engelsen BILL TO: Accounts Payable

ERM Northern Division (formerly ERM Northern Division (formerly

ERM-North Central)
One Continental Towers
1701 Golf Road, Suite 1-700

ERM-North Central)
One Continental Towers
1701 Golf Road, Suite 1-700

PHONE: Rolling Meadows, IL 60008-4242 847-258-8991 P.O.# 012633-1257

**FAX:** 847-258-8901 **PROJECT** # 0693965 Taylorville MGP

DATE RECEIVED: 08/22/2023

DATE COMPLETED: 08/28/2023

CONTACT: Joel Tillman

FRACTION #	<u>NAME</u>	TEST
01A	20230817-0819-SAM1	Modified TO-13A
02A	20230817-0819-SAM2	Modified TO-13A
03A	20230817-0819-SAM3	Modified TO-13A
04A	20230817-0819-SAM4	Modified TO-13A
05A	20230817-0819-SAM5	Modified TO-13A
06A	20230817-0819-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

	The	ial flages	00/00/00
CERTIFIED BY:			DATE: $\frac{08/28/23}{}$
			i d

Technical Director

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.



# LABORATORY NARRATIVE Modified TO-13A ERM Northern Division (formerly ERM-North Central) Workorder# 2308458

Six PUF/XAD Cartridge-Low Volume samples were received on August 22, 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.

Requirement	TO-13A	ATL Modifications
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< th=""><th><reporting limit<="" th=""></reporting></th></mdl<>	<reporting limit<="" th=""></reporting>
Surrogate Recoveries	60-120%	50-150% for Field Surrogates Fluoranthene-d10 and Benzo(a)pyrene-d12

#### **Receiving Notes**

A Temperature Blank was not included with the shipment. Temperature was measured on a representative sample and was not within  $4\pm2$  °C. Coolant in the form of blue ice was present. Analysis proceeded.

The custody seals arrived broken and analysis proceeded.

#### **Analytical Notes**

The sample cartridges were pre-spiked with Fluoranthene-d10 and Benzo(a)Pyrene-d12 on 08/10/2023.

#### **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



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

Client Sample ID: 20230817-0819-SAM1

Lab ID#: 2308458-01A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	9.7
2-Methylnaphthalene	1.0	2.3

Client Sample ID: 20230817-0819-SAM2

Lab ID#: 2308458-02A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	15
2-Methylnaphthalene	1.0	3.8

Client Sample ID: 20230817-0819-SAM3

Lab ID#: 2308458-03A

		Rpt. Limit	Amount
Compound		(ug)	(ug)
Naphthalene		1.0	1.5

Client Sample ID: 20230817-0819-SAM4

Lab ID#: 2308458-04A
No Detections Were Found.

Client Sample ID: 20230817-0819-SAM5

Lab ID#: 2308458-05A
No Detections Were Found.

Client Sample ID: 20230817-0819-SAM6

Lab ID#: 2308458-06A
No Detections Were Found.



#### Lab ID#: 2308458-01A

File Name:	12082407	Date of Collection: 8/19/23 4:33:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/24/23 12:17 PM
		Date of Extraction: 8/24/23

Z W	1.00 Date of Analysis	1.00 Date of Analysis. 0/24/20 12.17 1 iii	
	Date of Extracti	ion: 8/24/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	9.7	
2-Methylnaphthalene	1.0	2.3	
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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	76	60-120	
Pyrene-d10	86	60-120	
Benzo(a)pyrene-d12	73	50-150	
Fluoranthene-d10	74	50-150	



Lab ID#: 2308458-02A

File Name:	12082408	Date of Collection: 8/19/23 4:37:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/24/23 12:47 PM
		Date of Extraction: 8/24/23

	Date of Evtra	Date of Extraction: 8/24/23		
	Rpt. Limit	Amount		
Compound	(ug)	(ug)		
Naphthalene	1.0	15		
2-Methylnaphthalene	1.0	3.8		
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		
		Method		
Surrogates	%Recovery	Limits		
Fluorene-d10	84	60-120		
Pyrene-d10	86	60-120		
Benzo(a)pyrene-d12	80	50-150		
Fluoranthene-d10	80	50-150		



Lab ID#: 2308458-03A

File Name:	12082409	Date of Collection: 8/19/23 4:42:00 PM
Dil. Factor:	1.00	Date of Analysis: 8/24/23 01:17 PM
		Date of Extraction: 8/24/23

	Date of Extraction: 8/24/23	
	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.5
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
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	83	60-120
Pyrene-d10	93	60-120
Benzo(a)pyrene-d12	75	50-150
Fluoranthene-d10	75	50-150



Lab ID#: 2308458-04A

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

File Name: Date of Collection: 8/19/23 4:46:00 PM 12082410 Dil. Factor: Date of Analysis: 8/24/23 01:47 PM 1.00

	Date of Extrao	Date of Extraction: 8/24/23	
	Rpt. Limit	Amount	
Compound	(ug)	(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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	90	60-120	
Pyrene-d10	77	60-120	
Benzo(a)pyrene-d12	62	50-150	
Fluoranthene-d10	81	50-150	



Lab ID#: 2308458-05A

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

File Name: 12082411 Date of Collection: 8/19/23 4:48:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/24/23 02:17 PM
Date of Extraction: 8/24/23

	1.00 Date of Analysi	arysis. 0/2-4/20 02.17 1 W	
	Date of Extract	ion: 8/24/23	
	Rpt. Limit	Amount	
Compound	(ug)	(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	
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	84	60-120	
Pyrene-d10	88	60-120	
Benzo(a)pyrene-d12	75	50-150	
Fluoranthene-d10	76	50-150	



Lab ID#: 2308458-06A

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

File Name: 12082412 Date of Collection: 8/19/23 4:50:00 PM
Dil. Factor: 1.00 Date of Analysis: 8/24/23 02:47 PM
Date of Extraction: 8/24/23

	1.00 Date of Analys	313. 0/24/20 02.47 1 W
	Date of Extrac	ction: 8/24/23
	Rpt. Limit	Amount
Compound	(ug)	(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
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	80	60-120
Pyrene-d10	87	60-120
Benzo(a)pyrene-d12	94	50-150
Fluoranthene-d10	85	50-150



#### Client Sample ID: Lab Blank Lab ID#: 2308458-07A

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

File Name: 12082406 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/24/23 11:47 AM

Date of E	Extraction: 8/24/23
Rpt. Limit	Amount
(ug)	(ug)
1.0	Not Detected
	Method
%Recovery	Limits
84	60-120
80	60-120
87	50-150
79	50-150
	Rpt. Limit (ug)  1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.



#### Client Sample ID: CCV Lab ID#: 2308458-08A

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

File Name: 12082403 **Date of Collection: NA** Dil. Factor: 1.00

Date of Analysis: 8/24/23 10:13 AM

Date of Extraction: NA

Compound	%Recovery
Naphthalene	91
2-Methylnaphthalene	91
2-Chloronaphthalene	96
Acenaphthylene	91
Acenaphthene	88
Fluorene	93
Phenanthrene	88
Anthracene	74
Fluoranthene	93
Pyrene	89
Chrysene	88
Benzo(a)anthracene	86
Benzo(b)fluoranthene	98
Benzo(k)fluoranthene	96
Benzo(a)pyrene	92
Indeno(1,2,3-c,d)pyrene	83
Dibenz(a,h)anthracene	91
Benzo(g,h,i)perylene	93

Surrogates	%Recovery	Method Limits
Fluorene-d10	94	70-130
Pyrene-d10	89	70-130
Benzo(a)pyrene-d12	105	70-130
Fluoranthene-d10	96	70-130



#### **Client Sample ID: LCS** Lab ID#: 2308458-09A

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

File Name: 12082404 **Date of Collection: NA** Dil. Factor: 1.00 Date of Analysis: 8/24/23 10:47 AM

Date of Extraction: 8/24/23

	Date of Extraction: 8/24/23	
Compound	%Recovery	Method Limits
·		
Naphthalene	66	60-120
2-Methylnaphthalene	74	60-120
2-Chloronaphthalene	76	60-120
Acenaphthylene	70	60-120
Acenaphthene	68	60-120
Fluorene	80	60-120
Phenanthrene	74	60-120
Anthracene	76	60-120
Fluoranthene	85	60-120
Pyrene	72	60-120
Chrysene	77	60-120
Benzo(a)anthracene	77	60-120
Benzo(b)fluoranthene	81	60-120
Benzo(k)fluoranthene	81	60-120
Benzo(a)pyrene	78	60-120
Indeno(1,2,3-c,d)pyrene	78	60-120
Dibenz(a,h)anthracene	80	60-120
Benzo(g,h,i)perylene	80	60-120
Container Type: NA - Not Applicable		
	·	Method
Surrogates	%Recovery	Limits
Fluorene-d10	80	60-120
Pyrene-d10	71	60-120
Benzo(a)pyrene-d12	91	50-150
Fluoranthene-d10	83	50-150



Fluoranthene-d10

#### Client Sample ID: LCSD Lab ID#: 2308458-09AA

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

File Name: 12082425 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/24/

. Factor: 1.00 Date of Analysis: 8/24/23 09:17 PM
Date of Extraction: 8/24/23

	Date of Extraction: 8/24/23	
Compound	%Recovery	Method Limits
Naphthalene	70	60-120
2-Methylnaphthalene	75	60-120
2-Chloronaphthalene	82	60-120
Acenaphthylene	75	60-120
Acenaphthene	71	60-120
Fluorene	80	60-120
Phenanthrene	77	60-120
Anthracene	78	60-120
Fluoranthene	83	60-120
Pyrene	80	60-120
Chrysene	78	60-120
Benzo(a)anthracene	80	60-120
Benzo(b)fluoranthene	91	60-120
Benzo(k)fluoranthene	81	60-120
Benzo(a)pyrene	80	60-120
Indeno(1,2,3-c,d)pyrene	67	60-120
Dibenz(a,h)anthracene	78	60-120
Benzo(g,h,i)perylene	79	60-120
Container Type: NA - Not Applicable		
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	83	60-120
Pyrene-d10	81	60-120
Benzo(a)pyrene-d12	90	50-150

77

50-150