

9/12/2023

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 #: 2308625

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/29/2023 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 #: 2308625

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: 08/29/2023

DATE COMPLETED: 09/12/2023

CONTACT: Joel Tillman

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	20230814-0828-SAM1	EPA Method 325B
02A	20230814-0828-SAM2	EPA Method 325B
03A	20230814-0828-SAM3	EPA Method 325B
04A	20230814-0828-SAM4	EPA Method 325B
05A	20230814-0828-SAM5	EPA Method 325B
06A	20230814-0828-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

CERTIFIED BY:	Ju	in Junga	DATE: 09/12/23
CERTIFIED DIT			5.112.

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# 2308625

Six Carbopack X ERM samples were received on August 29, 2023. Six Carbopack X ERM samples were received on August 29, 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**

There were no receiving discrepancies.

#### **Analytical Notes**

There were no analytical discrepancies.

#### **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: 20230814-0828-SAM1

Lab ID#: 2308625-01A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.64
Toluene	0.48	0.56
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.30 J
o-Xylene	0.54	0.27 U

**Client Sample ID: 20230814-0828-SAM2** 

Lab ID#: 2308625-02A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.92
Toluene	0.48	0.91
Ethyl Benzene	0.54	0.38 J
m,p-Xylene	0.54	0.53 J
o-Xylene	0.54	0.27 U

Client Sample ID: 20230814-0828-SAM3

Lab ID#: 2308625-03A

	Rpt. Limit (ug/m3)	Amount (ug/m3)
Compound		
Styrene	0.50	0.20 U
Benzene	0.37	0.47
Toluene	0.48	0.34 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: 20230814-0828-SAM4

Lab ID#: 2308625-04A



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

Client Sample ID: 20230814-0828-SAM4

Lab ID#: 2308625-04A

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.61
Toluene	0.48	0.54
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.33 J
o-Xylene	0.54	0.27 U

Client Sample ID: 20230814-0828-SAM5

Lab ID#: 2308625-05A

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.64
Toluene	0.48	0.54
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.29 J
o-Xylene	0.54	0.27 U

Client Sample ID: 20230814-0828-SAM6

Lab ID#: 2308625-06A

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#: 2308625-01A

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

File Name: Date of Collection: 8/28/23 10:39:00 AM 10083137 Dil. Factor: Date of Analysis: 9/1/23 12:04 AM 1.00 Date of Extraction: NA

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.64
Toluene	0.48	0.56
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.30 J
o-Xvlene	0.54	0.27 Ū

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



Lab ID#: 2308625-02A

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

File Name: Date of Collection: 8/28/23 10:35:00 AM 10083138 Dil. Factor: Date of Analysis: 9/1/23 12:32 AM 1.00 Date of Extraction: NA

Compound	Rpt. Limit (ug/m3)	Amount (ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.92
Toluene	0.48	0.91
Ethyl Benzene	0.54	0.38 J
m,p-Xylene	0.54	0.53 J
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#: 2308625-03A

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

File Name: Date of Collection: 8/28/23 10:32:00 AM 10083139 Dil. Factor: Date of Analysis: 9/1/23 01:00 AM 1.00 Date of Extraction: NA

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.47
Toluene	0.48	0.34 J
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.27 U
o-Xvlene	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#: 2308625-04A

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

File Name: 10083140 Date of Collection: 8/28/23 10:42:00 AM
Dil. Factor: 1.00 Date of Analysis: 9/1/23 01:28 AM
Date of Extraction: NA

0	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.61
Toluene	0.48	0.54
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.33 J
o-Xvlene	0.54	0.27 U

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

J = Estimated value.



Lab ID#: 2308625-05A

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

File Name: 10083142 Date of Collection: 8/28/23 10:43:00 AM
Dil. Factor: 1.00 Date of Analysis: 9/1/23 02:18 AM
Date of Extraction: NA

	Rpt. Limit	Amount
Compound	(ug/m3)	(ug/m3)
Styrene	0.50	0.20 U
Benzene	0.37	0.64
Toluene	0.48	0.54
Ethyl Benzene	0.54	0.27 U
m,p-Xylene	0.54	0.29 J
o-Xylene	0.54	0.27 U

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

J = Estimated value.



Lab ID#: 2308625-06A

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

File Name: 10083136 Date of Collection: 8/28/23 11:30:00 AM
Dil. Factor: 1.00 Date of Analysis: 8/31/23 11:37 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#: 2308625-07A

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

File Name: 10083108A Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/31/23 10:23 AM

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: CCV Lab ID#: 2308625-08A

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

File Name: 10083130 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 8/31/23 08:52 PM

Date of Extraction: NA

Compound	%Recovery	
Styrene	110	
Benzene	106	
Toluene	107	
Ethyl Benzene	109	
m,p-Xylene	109	
o-Xylene	106	 



# Client Sample ID: CCV Lab ID#: 2308625-08B

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

File Name:	10083141	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/1/23 01:51 AM
		Date of Extraction: NA

Compound	%Recovery	
Styrene	93	
Benzene	100	
Toluene	98	
Ethyl Benzene	94	
m,p-Xylene	94	
o-Xylene	92	 



### Client Sample ID: CCV Lab ID#: 2308625-08C

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

File Name: 10083152 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/1/23 06:09 AM

Date of Extraction: NA

Compound	%Recovery	
Styrene	110	
Benzene	103	
Toluene	110	
Ethyl Benzene	108	
m,p-Xylene	108	
o-Xylene	108	



9/8/2023

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 #: 2308640

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 8/29/2023 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 #: 2308640

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: 08/29/2023

DATE COMPLETED: 09/08/2023

CONTACT: Joel Tillman

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	20230824-0826-SAM-1	Modified TO-13A
02A	20230824-0826-SAM-2	Modified TO-13A
03A	20230824-0826-SAM-3	Modified TO-13A
04A	20230824-0826-SAM-4	Modified TO-13A
05A	20230824-0826-SAM-5	Modified TO-13A
06A	20230824-0826-SAM-6	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	ide payer	
CERTIFIED BY:		0	DATE: $\frac{09/08/23}{}$
			<del>-</del>

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# 2308640

Six PUF/XAD Cartridge-Low Volume samples were received on August 29, 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< td=""><td><reporting limit<="" td=""></reporting></td></mdl<>	<reporting limit<="" td=""></reporting>
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 08/15/2023.

#### **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: 20230824-0826-SAM-1

Lab ID#: 2308640-01A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	2.1

Client Sample ID: 20230824-0826-SAM-2

Lab ID#: 2308640-02A

Compound	(ug)	Amount (ug)
Naphthalene	1.0	13
2-Methylnaphthalene	1.0	4.6

Client Sample ID: 20230824-0826-SAM-3

Lab ID#: 2308640-03A

	Kpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.4

Client Sample ID: 20230824-0826-SAM-4

Lab ID#: 2308640-04A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.6

Client Sample ID: 20230824-0826-SAM-5

Lab ID#: 2308640-05A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.4

Client Sample ID: 20230824-0826-SAM-6

Lab ID#: 2308640-06A
No Detections Were Found.



# Lab ID#: 2308640-01A

File Name:	12090614	Date of Collection: 8/26/23 11:18:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/6/23 01:53 PM
		Date of Extraction: 8/31/23

DII. Factor:	1.00 Date of Analys	SIS: 9/6/23 01:53 PM	
	Date of Extrac	action: 8/31/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	2.1	
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	91	60-120	
Pyrene-d10	92	60-120	
Benzo(a)pyrene-d12	85	50-150	
Fluoranthene-d10	78	50-150	

Surrogates	%Recovery	Limits
Fluorene-d10	91	60-120
Pyrene-d10	92	60-120
Benzo(a)pyrene-d12	85	50-150
Fluoranthene-d10	78	50-150



Lab ID#: 2308640-02A

File Name:	12090615	Date of Collection: 8/26/23 11:22:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/6/23 02:22 PM
		Date of Extraction: 8/31/23

Dill I dotor:	1.00 Date of Arialy	Date of Allarysis. 9/0/23 02.22 F W	
	Date of Extra	ction: 8/31/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	13	
2-Methylnaphthalene	1.0	4.6	
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	93	60-120	
Pyrene-d10	98	60-120	
Benzo(a)pyrene-d12	70	50-150	
Fluoranthene-d10	76	50-150	



Lab ID#: 2308640-03A

File Name:	12090616	Date of Collection: 8/26/23 11:28:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/6/23 02:52 PM
		Date of Extraction: 8/31/23

DII. Factor.	1.00 Date of Analys	SIS: 9/6/23 U2:52 PIVI
	Date of Extrac	tion: 8/31/23
	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.4
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	94	60-120
Pyrene-d10	100	60-120
Benzo(a)pyrene-d12	90	50-150
Fluoranthene-d10	85	50-150



Lab ID#: 2308640-04A

File Name:	12090617	Date of Collection: 8/26/23 11:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/6/23 03:22 PM
		Date of Extraction: 8/31/23

Dill I dotor:	1.00 Date of Arialy	Date of Analysis. 9/0/23 03.22 PW	
	Date of Extra	ction: 8/31/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	1.6	
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	95	60-120	
Pyrene-d10	99	60-120	
Benzo(a)pyrene-d12	87	50-150	
Fluoranthene-d10	84	50-150	



Lab ID#: 2308640-05A

File Name:	12090618	Date of Collection: 8/26/23 11:04:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/6/23 03:52 PM
		Date of Extraction: 8/31/23

Dill I dotor:	1.00 Date of Affairy	Date of Allalysis. 9/0/23 03.32 PM		
	Date of Extra	ction: 8/31/23		
	Rpt. Limit	Amount		
Compound	(ug)	(ug)		
Naphthalene	1.0	1.4		
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	95	60-120		
Pyrene-d10	102	60-120		
Benzo(a)pyrene-d12	90	50-150		
Fluoranthene-d10	84	50-150		



Lab ID#: 2308640-06A

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

File Name: 12090619 Date of Collection: 8/26/23 11:30:00 AM
Dil. Factor: 1.00 Date of Analysis: 9/6/23 04:22 PM

Date of Extraction: 8/31/23

	Date of Extrac	etion: 8/31/23
	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	92	60-120
Pyrene-d10	100	60-120
Benzo(a)pyrene-d12	111	50-150
Fluoranthene-d10	92	50-150



# Client Sample ID: Lab Blank Lab ID#: 2308640-07A

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

File Name: 12090611 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 12:23 PM

	Date of Extraction: 8/31/23		
_	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	99	60-120	
Benzo(a)pyrene-d12	109	50-150	
Fluoranthene-d10	89	50-150	



# Client Sample ID: CCV Lab ID#: 2308640-08A

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

File Name: 12090608 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 10:47 AM

Date of Extraction: NA

Compound	%Recovery
Naphthalene	117
2-Methylnaphthalene	122
2-Chloronaphthalene	117
Acenaphthylene	118
Acenaphthene	113
Fluorene	118
Phenanthrene	114
Anthracene	117
Fluoranthene	120
Pyrene	122
Chrysene	114
Benzo(a)anthracene	119
Benzo(b)fluoranthene	123
Benzo(k)fluoranthene	116
Benzo(a)pyrene	126
Indeno(1,2,3-c,d)pyrene	121
Dibenz(a,h)anthracene	123
Benzo(g,h,i)perylene	118

	· ·	Method
Surrogates	%Recovery	Limits
Fluorene-d10	116	70-130
Pyrene-d10	118	70-130
Benzo(a)pyrene-d12	123	70-130
Fluoranthene-d10	119	70-130



# Client Sample ID: LCS Lab ID#: 2308640-09A

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

File Name: 12090609 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 11:23 AM

Date of Extraction: 8/31/23

Date of Extraction: 8/31/23		
%Recovery	Method Limits	
	60-120	
	60-120	
	60-120	
	60-120	
	60-120	
	60-120	
	60-120	
	60-120	
	60-120	
97	60-120	
91	60-120	
98	60-120	
100	60-120	
92	60-120	
100	60-120	
99	60-120	
100	60-120	
100	60-120	
	Method	
%Recovery	Limits	
93	60-120	
97	60-120	
117	50-150	
93	50-150	
	%Recovery  73 85 84 86 80 90 89 96 95 97 91 98 100 92 100 99 100 100  %Recovery  93 97 117	



#### Client Sample ID: LCSD Lab ID#: 2308640-09AA

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

File Name: 12090610 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 11:53 AM

Date of Extraction: 8/31/23

	Date of Extraction: 8/31/23		
		Method	
Compound	%Recovery	Limits	
Naphthalene	79	60-120	
2-Methylnaphthalene	88	60-120	
2-Chloronaphthalene	86	60-120	
Acenaphthylene	88	60-120	
Acenaphthene	82	60-120	
Fluorene	90	60-120	
Phenanthrene	86	60-120	
Anthracene	96	60-120	
Fluoranthene	93	60-120	
Pyrene	94	60-120	
Chrysene	89	60-120	
Benzo(a)anthracene	98	60-120	
Benzo(b)fluoranthene	101	60-120	
Benzo(k)fluoranthene	91	60-120	
Benzo(a)pyrene	105	60-120	
Indeno(1,2,3-c,d)pyrene	102	60-120	
Dibenz(a,h)anthracene	105	60-120	
Benzo(g,h,i)perylene	102	60-120	
Container Type: NA - Not Applicable			
		Method	
Surrogates	%Recovery	Limits	
Fluorene-d10	91	60-120	
Pyrene-d10	95	60-120	
Benzo(a)pyrene-d12	118	50-150	
Fluoranthene-d10	92	50-150	



9/12/2023

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 #: 2309015

Dear Mr. Bryan Engelsen

The following report includes the data for the above referenced project for sample(s) received on 9/1/2023 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 #: 2309015

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: 09/01/2023 CONTACT: Joel Tillman DATE COMPLETED: 09/08/2023

FRACTION #	<u>NAME</u>	<u>TEST</u>
01A	20230828-0831-SAM1	Modified TO-13A
02A	20230828-0831-SAM2	Modified TO-13A
03A	20230828-0831-SAM3	Modified TO-13A
04A	20230828-0831-SAM4	Modified TO-13A
05A	20230828-0831-SAM5	Modified TO-13A
06A	20230828-0831-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: DATE: 09/12/23

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.

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# 2309015

Six PUF/XAD Cartridge-Low Volume samples were received on September 01, 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	Calibration range: 1.0-500 ug/mL in Methylene chloride
	Hexane	
Method Blank	<mdl< td=""><td><reporting limit<="" td=""></reporting></td></mdl<>	<reporting limit<="" td=""></reporting>
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 08/22/2023.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in CCV analyses have not been flagged.

#### **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: 20230828-0831-SAM1

Lab ID#: 2309015-01A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.6

Client Sample ID: 20230828-0831-SAM2

Lab ID#: 2309015-02A

Compound	(ug)	(ug)
Naphthalene	1.0	2.5

Client Sample ID: 20230828-0831-SAM3

Lab ID#: 2309015-03A
No Detections Were Found.

Client Sample ID: 20230828-0831-SAM4

Lab ID#: 2309015-04A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	2.4

Client Sample ID: 20230828-0831-SAM5

Lab ID#: 2309015-05A

	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.8

Client Sample ID: 20230828-0831-SAM6

Lab ID#: 2309015-06A
No Detections Were Found.



Lab ID#: 2309015-01A

File Name:	12090635	Date of Collection: 8/31/23 8:32:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/7/23 12:09 AM
		Date of Extraction: 9/5/23

	Date of Extraction: 9/5/23	
	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.6
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	95	60-150
Pyrene-d10	94	60-150
Benzo(a)pyrene-d12	98	50-150
Fluoranthene-d10	92	50-150



Lab ID#: 2309015-02A

File Name:	12090636	Date of Collection: 8/31/23 8:22:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/7/23 12:39 AM
		Date of Extraction: 9/5/23

Dil. I actor.	1.00 Date of Affairy	Date of Allalysis. 9/1/23 12:39 AW	
	Date of Extra	ction: 9/5/23	
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	2.5	
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	95	60-150	
Pyrene-d10	100	60-150	
Benzo(a)pyrene-d12	91	50-150	
Fluoranthene-d10	90	50-150	



Lab ID#: 2309015-03A

File Name:	12090637	Date of Collection: 8/31/23 8:00:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/7/23 01:09 AM
		Date of Extraction: 9/5/23

	1.00 Date of Analys	513. 3/1/20 01.03 AM	
	Date of Extrac	Date of Extraction: 9/5/23	
	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	95	60-150	
Pyrene-d10	103	60-150	
Benzo(a)pyrene-d12	95	50-150	
Fluoranthene-d10	88	50-150	



Lab ID#: 2309015-04A

File Name:	12090638	Date of Collection: 8/31/23 8:54:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/7/23 01:39 AM
		Date of Extraction: 9/5/23

2	1.00 Date of Analysi	Date of Allarysis. 3/1/25 01:55 Alli	
	Date of Extra		
	Rpt. Limit	Amount	
Compound	(ug)	(ug)	
Naphthalene	1.0	2.4	
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	60-150	
Pyrene-d10	100	60-150	
Benzo(a)pyrene-d12	84	50-150	
Fluoranthene-d10	83	50-150	



Lab ID#: 2309015-05A

File Name:	12090639	Date of Collection: 8/31/23 9:03:00 AM
Dil. Factor:	1.00	Date of Analysis: 9/7/23 02:09 AM
		Date of Extraction: 9/5/23

Z 1 4.01011	1100 Date of Analysi	13. 3/1/20 02.03 AM
	Date of Extract	tion: 9/5/23
	Rpt. Limit	Amount
Compound	(ug)	(ug)
Naphthalene	1.0	1.8
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	96	60-150
Pyrene-d10	101	60-150
Benzo(a)pyrene-d12	100	50-150
Fluoranthene-d10	90	50-150



Lab ID#: 2309015-06A

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

File Name: 12090640 Date of Collection: 8/31/23 7:59:00 AM
Dil. Factor: 1.00 Date of Analysis: 9/7/23 02:39 AM

Date of Extraction: 9/5/23

Z 4.0101.	1100 Date of Allarys	Date of Analysis. Stries 02.00 Am	
	Date of Extract	raction: 9/5/23	
	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	89	60-150	
Pyrene-d10	94	60-150	
Benzo(a)pyrene-d12	112	50-150	
Fluoranthene-d10	93	50-150	



#### Client Sample ID: Lab Blank Lab ID#: 2309015-07A

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

File Name: 12090634 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 11:39 PM

	Date of Faters	
		oction: 9/5/23
Compound	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	96	60-150
Pyrene-d10	103	60-150
Benzo(a)pyrene-d12	122	50-150
Fluoranthene-d10	98	50-150



# Client Sample ID: CCV Lab ID#: 2309015-08A

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

File Name: 12090631 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 9/6/23 10:09 PM

Date of Extraction: 8/28/23

Compound	%Recovery
Naphthalene	116
2-Methylnaphthalene	120
2-Chloronaphthalene	115
Acenaphthylene	120
Acenaphthene	113
Fluorene	117
Phenanthrene	113
Anthracene	113
Fluoranthene	120
Pyrene	116
Chrysene	111
Benzo(a)anthracene	120
Benzo(b)fluoranthene	131 Q
Benzo(k)fluoranthene	119
Benzo(a)pyrene	125
Indeno(1,2,3-c,d)pyrene	104
Dibenz(a,h)anthracene	117
Benzo(g,h,i)perylene	112

# Q = Exceeds Quality Control limits.

		Method Limits
Surrogates	%Recovery	
Fluorene-d10	117	70-130
Pyrene-d10	114	70-130
Benzo(a)pyrene-d12	123	70-130
Fluoranthene-d10	120	70-130



# **Client Sample ID: LCS** Lab ID#: 2309015-09A

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

File Name: **Date of Collection: NA** 12090632 Dil. Factor: 1.00 Date of Analysis: 9/6/23 10:39 PM

Date of Extraction: 9/5/23

	Date of Extraction: 5/5/25	
Compound	%Recovery	Method Limits
Naphthalene	76	60-120
2-Methylnaphthalene	86	60-120
2-Chloronaphthalene	86	60-120
Acenaphthylene	88	60-120
Acenaphthene	81	60-120
Fluorene	90	60-120
Phenanthrene	87	60-120
Anthracene	97	60-120
Fluoranthene	93	60-120
Pyrene	95	60-120
Chrysene	88	60-120
Benzo(a)anthracene	100	60-120
Benzo(b)fluoranthene	109	60-120
Benzo(k)fluoranthene	96	60-120
Benzo(a)pyrene	105	60-120
Indeno(1,2,3-c,d)pyrene	79	60-120
Dibenz(a,h)anthracene	93	60-120
Benzo(g,h,i)perylene	91	60-120
Container Type: NA - Not Applicable	•	
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	94	60-150
Pyrene-d10	97	60-150
Benzo(a)pyrene-d12	124	50-150
Fluoranthene-d10	94	50-150



#### **Client Sample ID: LCSD** Lab ID#: 2309015-09AA

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

File Name: **Date of Collection: NA** 12090633 Dil. Factor: 1.00

Date of Analysis: 9/6/23 11:09 PM

Date of Extraction: 9/5/23

	Bate of Extraction: 5/5/25	
Compound	%Recovery	Method Limits
Naphthalene	88	60-120
2-Methylnaphthalene	98	60-120
2-Chloronaphthalene	92	60-120
Acenaphthylene	93	60-120
Acenaphthene	85	60-120
Fluorene	93	60-120
Phenanthrene	90	60-120
Anthracene	100	60-120
Fluoranthene	96	60-120
Pyrene	96	60-120
Chrysene	90	60-120
Benzo(a)anthracene	102	60-120
Benzo(b)fluoranthene	107	60-120
Benzo(k)fluoranthene	98	60-120
Benzo(a)pyrene	105	60-120
Indeno(1,2,3-c,d)pyrene	82	60-120
Dibenz(a,h)anthracene	94	60-120
Benzo(g,h,i)perylene	92	60-120
Container Type: NA - Not Applicable		
		Method
Surrogates	%Recovery	Limits
Fluorene-d10	96	60-150
Pyrene-d10	96	60-150
Benzo(a)pyrene-d12	122	50-150
Fluoranthene-d10	98	50-150