

**SUBJECT**

Ford LTP SSVE System Notification of  
Down Time Response Letter  
36200 Plymouth Road, Livonia, Wayne County, MI  
Consent Decree No 2:1712372-GAD-RSW (CD)  
Site ID No.: 82002970

**DATE**

November 5, 2025

**COPIES TO**

Paul Owens, EGLE  
Matt Williams, EGLE  
Colleen Liddell, Ford  
Chuck Pinter, Ford

**TO**

Erik Gurshaw  
EGLE Warren District Office  
27700 Donald Court  
Warren, Michigan 48092-2793  
[gurshawe@michigan.gov](mailto:gurshawe@michigan.gov)

**PROJECT NUMBER**

30251157

**NAME**

Megan Meckley  
301-304-8347  
[megan.meckley@arcadis.com](mailto:megan.meckley@arcadis.com)

---

On behalf of Ford Motor Company (Ford), Arcadis of Michigan, LLC (Arcadis) has prepared this report for the Livonia Transmission Plant (LTP) site (the Site). This report documents response activities associated with the sanitary sewer vapor extraction (SSVE) system down time in accordance with the EGLE approval response letter "RE: Request to Revise SSVE Update Reporting from Monthly to Quarterly" dated November 21, 2023. The SSVE system was down between Sunday September 21, 2025 and Wednesday September 24, 2025. Subsequent response activities completed during this time are outlined in detail below. **Figure 1** displays the SSVE system location and associated compliance sampling locations.

As outlined in the letter of approval, if the SSVE system has not run for a continuous period of 24 hours or more, Ford is required to:

- Immediately collect vapor samples from manholes SAMH-1231, SL-2, and SL-3,
- Collect additional sampling if site specific preferential pathway criteria are exceeded, and
- Notify EGLE via email and submit a report within 45 days detailing response activities and their effectiveness.

Following remote notification that the system had gone down on Sunday September 21, 2025, Arcadis diagnosed the issue, obtained a replacement motor starter, and coordinated with a local laboratory to conduct the analysis necessary for the required sampling. EGLE was notified via email that the system was down on Tuesday September 23, 2025. On the morning of Wednesday September 24, 2025, Arcadis collected vapor samples from manholes SAMH-1231, SL-2, and SL-3. By 1:30 pm on September 24, 2025, Arcadis and an electrician had replaced the motor starter and restarted the SSVE system. The system had been down for approximately 72 hours. The system has operated with no down time following completion of response activities.

Arcadis received results of the manhole vapor sampling on Friday September 26, 2025, and no site-specific preferential pathway criteria were observed. Planned monthly compliance sampling resumed on October 6, 2025 and site-specific preferential pathway criteria were not observed in that sample set either, demonstrating that the response activities were effective. The attached **Table 1** displays the results of the associated sampling and analytical reports are included in **Attachment 1**. The results will also be included in the upcoming semi-annual project monitoring report to be submitted on January 31, 2026.

In consultation with the electrician after the repair was completed, Arcadis visually inspected the motor starter for signs of what may have caused the fault. It was determined that the fault occurred at the terminal on the motor starter where wire leads connect from the blower. This may have been caused by temperature fluctuations or

Erik Gurshaw  
EGLE Warren District Office  
November 5, 2025

vibration associated with the equipment. Arcadis is implementing more frequent wire tightness checks (two times per year) to help prevent additional similar issues from occurring.

## Enclosures

Table 1	Compliance Sampling Results
Figure 1	Utility Corridor Response Activities
Attachment 1	Analytical Reports

# Tables

Table 1  
 Compliance Sampling Results  
 Ford Livonia Transmission Plant  
 36200 Plymouth Road  
 Livonia, Michigan

Location:	EGLE	MH-1231	MH-1231	SL-2	SL-2	SL-3	SL-3
Sample Name:	Residential	MH-1231_092425	MH-1231_100625	SL-2_092425	SL-2_100625	SL-3_092425	SL-3_100625
Sample Date:	Preferential	9/24/2025	10/6/2025	9/24/2025	10/6/2025	9/24/2025	10/6/2025
Sample Time:	Conduit Vapor	13:07	12:27	12:52	12:00	12:35	11:41
Sample Type:	SSVIAC	Bottle Vac	Summa	Bottle Vac	Summa	Bottle Vac	Summa
<b>Volatile Organic Compounds (VOCs)</b>							
1,1-Dichloroethylene	7,000	<0.95	<1.5 [<1.9]	<0.95	<1.5	<0.95	<1.5
1,4-Dioxane	170	<1.4	<2.6 [<3.4]	<1.4	<2.7	<1.4	<2.6
cis-1,2-Dichloroethylene	280	<0.91	<1.5 [<1.9]	<0.91	<1.5	<0.91	<1.5
Tetrachloroethylene	1,400	<1.6	<2.5 [<3.2]	<1.6	<2.6	<1.6	<2.5
trans-1,2-Dichloroethylene	2,800	<0.83	<1.5 [<1.9]	12	<1.5	<0.83	<1.5
Trichloroethylene	67	<1.2	<2.0 [<2.6]	<1.2	<2.1	<1.2	<2.0
Vinyl chloride	54	<0.74	<0.94 [<1.2]	<0.74	<0.99	<0.74	<0.95

**Table 1**  
**Compliance Sampling Results**  
**Ford Livonia Transmission Plant**  
**36200 Plymouth Road**  
**Livonia, Michigan**

**Notes:**

All results reported in  $\mu\text{g}/\text{m}^3$ .

< Denotes not detected above method detection limit.

[ ] Indicates duplicate sample

**Sample Type:**

Summa Indicates results are from lab analyzed summa canister.

**Abbreviations:**

$\mu\text{g}/\text{m}^3$  micrograms per cubic meter

EGLE Michigan Department of Environment, Great Lakes, and Energy

MH manhole

SL sample location

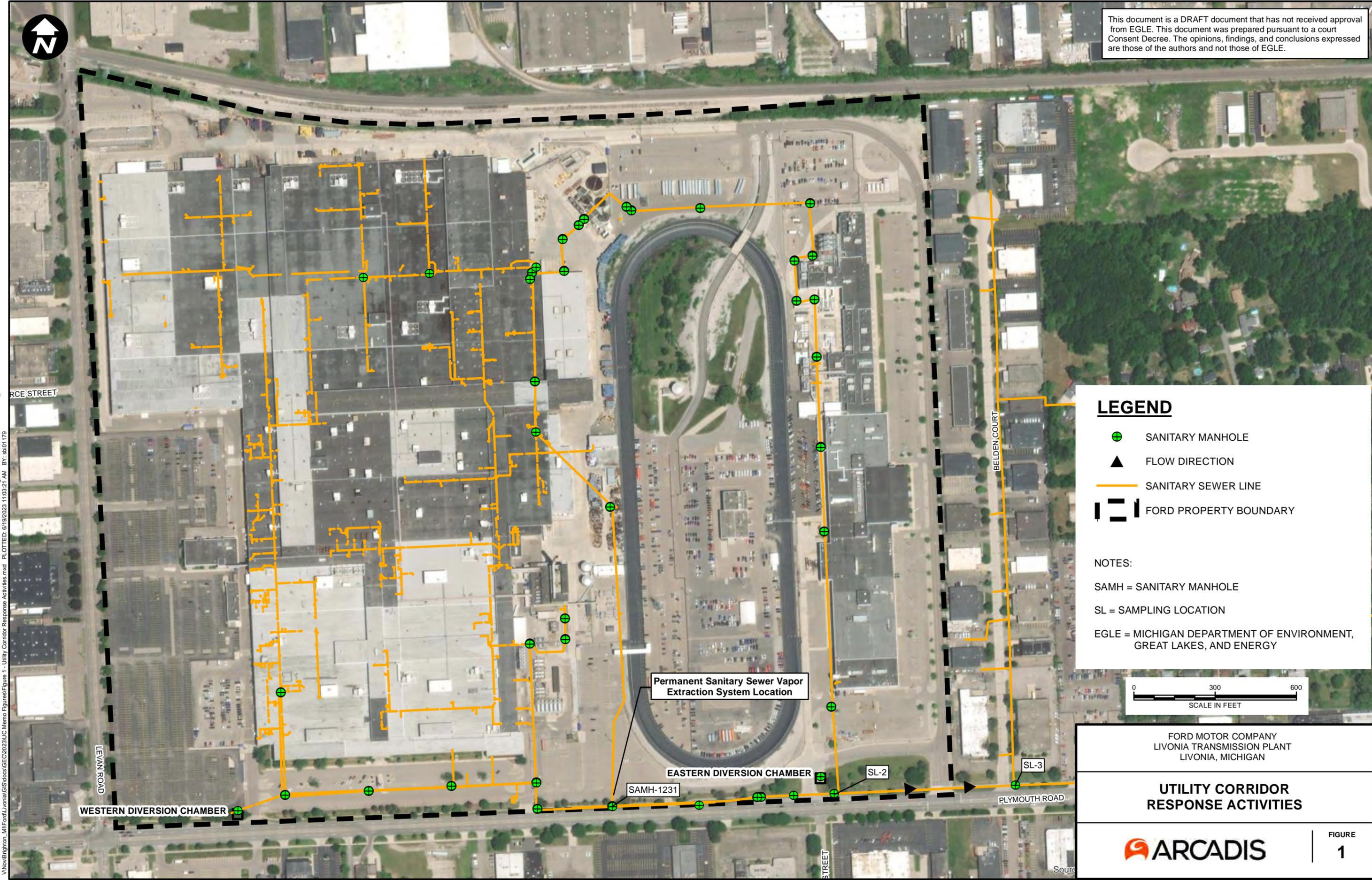
SSVIAC Site-specific volatilization to indoor air criteria

# Figures

This document is a DRAFT document that has not received approval from EGLE. This document was prepared pursuant to a court Consent Decree. The opinions, findings, and conclusions expressed are those of the authors and not those of EGLE.



CITY: Novi DIV: ENV DB: MG PIC: R. ELLIS PM: K. HINSKEY PROJECT NUMBER: 30167538 COORDINATE SYSTEM: NAD 1983 StatePlane Michigan South FIPS 2113 Feet Intl T1. LEN V:\Novi\Brighton\_Mill\ForLivonia\GIS\Gis\GEC02023\UC Memo Figures\Figure 1 - Utility Corridor Response Activities.mxd PLOTTED: 6/19/2023 11:03:21 AM BY: ab01179

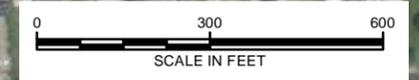


**LEGEND**

- SANITARY MANHOLE
- FLOW DIRECTION
- SANITARY SEWER LINE
- FORD PROPERTY BOUNDARY

NOTES:

- SAMH = SANITARY MANHOLE
- SL = SAMPLING LOCATION
- EGLE = MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY



FORD MOTOR COMPANY  
LIVONIA TRANSMISSION PLANT  
LIVONIA, MICHIGAN

**UTILITY CORRIDOR  
RESPONSE ACTIVITIES**

**ARCADIS**

FIGURE  
**1**

WESTERN DIVERSION CHAMBER

SAMH-1231

Permanent Sanitary Sewer Vapor  
Extraction System Location

EASTERN DIVERSION CHAMBER

SL-2

SL-3

PLYMOUTH ROAD

LEVAN ROAD

BELDEN COURT

STREET

Source

# Attachment 1

Analytical Reports



# Analytical Laboratory Report

Report ID: S79244.01(01)+QC01

Generated on 09/25/2025

## Report to

---

Attention: Megan Meckley  
ARCADIS U.S., Inc.  
28550 Cabot Drive, Suite 500  
Novi, MI 48377

Phone: O:301-304-8347 C:248-994-2241 FAX:  
Email: [megan.meckley@arcadis.com](mailto:megan.meckley@arcadis.com)

Additional Contacts: Matthew Williams

## Report produced by

---

Merit Laboratories, Inc.  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:  
John Lavery ([johnlavery@meritlabs.com](mailto:johnlavery@meritlabs.com))  
Barbara Ball ([bball@meritlabs.com](mailto:bball@meritlabs.com))

## Report Summary

---

Lab Sample ID(s): S79244.01-S79244.03  
Project: Ford LTP SSVE 30251157.901.04 (E205162)  
Collected Date(s): 09/24/2025  
Submitted Date/Time: 09/24/2025 15:25  
Sampled by: Kent Kasper / Joe Fostik  
P.O. #: 30251157.901.04

## Table of Contents

---

Cover Page (Page 1)  
General Report Notes (Page 2)  
Report Narrative (Page 2)  
Laboratory Accreditations (Page 3)  
Qualifier Descriptions (Page 3)  
Glossary of Abbreviations (Page 3)  
Method Summary (Page 4)  
Sample Summary (Page 5)  
QC Report (Pages 9-22)

Maya Murshak  
Technical Director



# Analytical Laboratory Report

## General Report Notes

---

Analytical results relate only to the samples tested, in the condition received by the laboratory.

Methods may be modified for improved performance.

Results reported on a dry weight basis where applicable.

'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).

When MDL results are provided, then 'Not detected' indicates that parameter was not found at a level equal to or greater than the MDL.

40 CFR Part 136 Table II Required Containers, Preservation Techniques and Holding Times for the Clean Water Act specify that samples for acrolein and acrylonitrile, and 2-chloroethylvinyl ether need to be preserved at a pH in the range of 4 to 5 or if not preserved, analyzed within 3 days of sampling.

QA/QC corresponding to this analytical report is a separate document with the same Merit ID reference and is available upon request.

Starred (\*) analytes are not NY NELAP accredited.

Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.

Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc.

Limits for drinking water samples, are listed as the MCL Limits (Maximum Contaminant Level Concentrations)

PFAS requirement: Section 9.3.8 of U.S. EPA Method 537.1 states "If the method analyte(s) found in the Field Sample is present in the

FRB at a concentration greater than 1/3 the MRL, then all samples collected with that FRB are invalid and must be recollected and reanalyzed."

Samples submitted without an accompanying FRB may not be acceptable for compliance purposes.

Wisconsin PFAs analysis: MDL = LOD; RL = LOQ. LOD and LOQ are adjusted for dilution.

All accreditations/certifications held by this laboratory are listed on page 3. Not all accreditations/certifications are applicable to this report.

For a specific list of accredited analytes, please feel free to contact the laboratory or visit <https://www.meritlabs.com/certifications>.

## Report Narrative

---

There is no additional narrative for this analytical report



# Analytical Laboratory Report

## Laboratory Accreditations (For Reference Only)

Authority	Accreditation ID
Michigan DEQ	#9956
DOD ELAP & ISO/IEC 17025:2017	#69699 PJLA Testing
WBENC	#2005110032
Ohio VAP	#CL0002
Indiana DOH	#C-MI-07
New York NELAC	#11814
North Carolina DENR	#680
North Carolina DOH	#26702
Pennsylvania DEP	#68-05884
Wisconsin DNR	FID# 399147320

## Qualifier Descriptions

Qualifier	Description
!	Result is outside of stated limit criteria
B	Compound also found in associated method blank
E	Concentration exceeds calibration range
F	Analysis run outside of holding time
G	Estimated result due to extraction run outside of holding time
H	Sample submitted and run outside of holding time
I	Matrix interference with internal standard
J	Estimated value less than reporting limit, but greater than MDL
L	Elevated reporting limit due to low sample amount
M	Result reported to MDL not RDL
O	Analysis performed by outside laboratory. See attached report.
R	Preliminary result
S	Surrogate recovery outside of control limits
T	No correction for total solids
X	Elevated reporting limit due to matrix interference
Y	Elevated reporting limit due to high target concentration
b	Value detected less than reporting limit, but greater than MDL
e	Reported value estimated due to interference
j	Analyte also found in associated method blank
o	Associated EIS outside of control limits
p	Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.
q	Qualifier ion ratio outside of control limits
x	Preserved from bulk sample

## Glossary of Abbreviations

Abbreviation	Description
RL/RDL	Reporting Limit
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
SW	EPA SW 846 (Soil and Wastewater) Methods
E	EPA Methods
SM	Standard Methods
LN	Linear
BR	Branched



# Analytical Laboratory Report

## Method Summary

Method	Version
N/A	Not Applicable
TO-15	EPA TO-15 Second Edition January 1999



# Analytical Laboratory Report

## Sample Summary (3 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S79244.01	SL-3_092425	Air	09/24/25 12:13 - 09/24/25 12:35
S79244.02	SL-2_092425	Air	09/24/25 12:47 - 09/24/25 12:52
S79244.03	MH-1231_092425	Air	09/24/25 13:02 - 09/24/25 13:07



# Analytical Laboratory Report

Lab Sample ID: S79244.01

Sample Tag: SL-3\_092425

Collected Date/Time: 09/24/2025 12:13 - 09/24/2025 12:35

Matrix: Air

COC Reference: A011515

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	n/a

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-6	N/A	09/25/25 10:30	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 09/25/25 14:34, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	2	0.23	ppbv	10	79-01-6	
Tetrachloroethene	Not detected	2	0.24	ppbv	10	127-18-4	
Vinyl chloride	Not detected	2	0.29	ppbv	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	2	0.23	ppbv	10	156-59-2	
trans-1,2-Dichloroethene	Not detected	2	0.21	ppbv	10	156-60-5	
1,1-Dichloroethene	Not detected	2	0.24	ppbv	10	75-35-4	
1,4-Dioxane	Not detected	20	0.38	ppbv	10	123-91-1	

TO-15, Method: TO-15, Run Date: 09/25/25 14:34, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	11	1.2	ug/m3	10	79-01-6	
Tetrachloroethene	Not detected	14	1.6	ug/m3	10	127-18-4	
Vinyl chloride	Not detected	5.1	0.74	ug/m3	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	7.9	0.91	ug/m3	10	156-59-2	
trans-1,2-Dichloroethene	Not detected	7.9	0.83	ug/m3	10	156-60-5	
1,1-Dichloroethene	Not detected	7.9	0.95	ug/m3	10	75-35-4	
1,4-Dioxane	Not detected	72	1.4	ug/m3	10	123-91-1	



# Analytical Laboratory Report

Lab Sample ID: S79244.02

Sample Tag: SL-2\_092425

Collected Date/Time: 09/24/2025 12:47 - 09/24/2025 12:52

Matrix: Air

COC Reference: A011515

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	n/a

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5	N/A	09/25/25 10:30	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 09/25/25 15:04, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	2	0.23	ppbv	10	79-01-6	
Tetrachloroethene	Not detected	2	0.24	ppbv	10	127-18-4	
Vinyl chloride	Not detected	2	0.29	ppbv	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	2	0.23	ppbv	10	156-59-2	
trans-1,2-Dichloroethene	3	2	0.21	ppbv	10	156-60-5	
1,1-Dichloroethene	Not detected	2	0.24	ppbv	10	75-35-4	
1,4-Dioxane	Not detected	20	0.38	ppbv	10	123-91-1	

TO-15, Method: TO-15, Run Date: 09/25/25 15:04, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	11	1.2	ug/m3	10	79-01-6	
Tetrachloroethene	Not detected	14	1.6	ug/m3	10	127-18-4	
Vinyl chloride	Not detected	5.1	0.74	ug/m3	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	7.9	0.91	ug/m3	10	156-59-2	
trans-1,2-Dichloroethene	12	7.9	0.83	ug/m3	10	156-60-5	
1,1-Dichloroethene	Not detected	7.9	0.95	ug/m3	10	75-35-4	
1,4-Dioxane	Not detected	72	1.4	ug/m3	10	123-91-1	



# Analytical Laboratory Report

Lab Sample ID: S79244.03

Sample Tag: MH-1231\_092425

Collected Date/Time: 09/24/2025 13:02 - 09/24/2025 13:07

Matrix: Air

COC Reference: A011515

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	Air Canister	None	No	RT	n/a

Extraction / Prep.

Parameter	Result	Method	Run Date	Analyst	Flags
Pressure check for TO-15*	-5.5	N/A	09/25/25 10:30	BDO	

Organics - Volatiles

TO-15, Method: TO-15, Run Date: 09/25/25 15:34, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	2	0.23	ppbv	10	79-01-6	
Tetrachloroethene	Not detected	2	0.24	ppbv	10	127-18-4	
Vinyl chloride	Not detected	2	0.29	ppbv	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	2	0.23	ppbv	10	156-59-2	
trans-1,2-Dichloroethene	Not detected	2	0.21	ppbv	10	156-60-5	
1,1-Dichloroethene	Not detected	2	0.24	ppbv	10	75-35-4	
1,4-Dioxane	Not detected	20	0.38	ppbv	10	123-91-1	

TO-15, Method: TO-15, Run Date: 09/25/25 15:34, Analyst: ASW

Parameter	Result	RL	MDL	Units	Dilution	CAS#	Flags
Trichloroethene	Not detected	11	1.2	ug/m3	10	79-01-6	
Tetrachloroethene	Not detected	14	1.6	ug/m3	10	127-18-4	
Vinyl chloride	Not detected	5.1	0.74	ug/m3	10	75-01-4	
cis-1,2-Dichloroethene	Not detected	7.9	0.91	ug/m3	10	156-59-2	
trans-1,2-Dichloroethene	Not detected	7.9	0.83	ug/m3	10	156-60-5	
1,1-Dichloroethene	Not detected	7.9	0.95	ug/m3	10	75-35-4	
1,4-Dioxane	Not detected	72	1.4	ug/m3	10	123-91-1	



# Quality Control Report

Report ID: S79244.01(01)+QC01  
Generated on 09/25/2025

Report to  
Attention: Megan Meckley  
ARCADIS U.S., Inc.  
28550 Cabot Drive, Suite 500  
Novi, MI 48377

Report Produced by  
Merit Laboratories  
2680 East Lansing Drive  
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Phone: O:301-304-8347 C:248-994-2241 FAX:

## Report Summary

Lab Sample ID(s): S79244.01-S79244.03  
Project: Ford LTP SSVE 30251157.901.04  
Submitted Date/Time: 09/24/2025 15:25  
Sampled by: Kent Kasper / Joe Fostik  
P.O. #: 30251157.901.04

## QC Report Sections

Cover Page (Page 9)  
Analysis Summary (Pages 10-12)  
Prep Batch Summary (Page 13)  
Surrogates per Lab Sample (Pages 14-16)  
Surrogates per QC Sample (Page 17)  
Internal Standards per Lab Sample (Pages 18-20)  
Internal Standards per QC Sample (Page 21)  
Batch QC Results (Page 22)

## Report Flag Descriptions

\*: QC result is outside of indicated control limits  
W: Surrogate result not applicable due to sample dilution

I certify that this data package is in compliance with the terms and conditions of the program, and project, and contractual requirements both technically and for completeness. Release of the data contained in this hardcopy data package and its computer-readable data submitted has been authorized by the Quality Assurance Manager and his/her designee, as verified by the following signature.

Barbara Ball  
Quality Assurance Manager

# QC Report - Analysis Summary

Lab Sample ID: S79244.01

Sample Tag: SL-3\_092425

Collected Date/Time: 09/24/2025 12:13 - 09/24/2025 12:35

Matrix: Air

COC Reference: A011515

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Organics - Volatiles</b>						
TO-15	TO-15	09/25/25 14:34	250925A8	GV250925G1	Yes	BLK/LCS/LCSD

# QC Report - Analysis Summary

Lab Sample ID: S79244.02

Sample Tag: SL-2\_092425

Collected Date/Time: 09/24/2025 12:47 - 09/24/2025 12:52

Matrix: Air

COC Reference: A011515

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Organics - Volatiles</b>						
TO-15	TO-15	09/25/25 15:04	250925A8	GV250925G1	Yes	BLK/LCS/LCSD

# QC Report - Analysis Summary

Lab Sample ID: S79244.03

Sample Tag: MH-1231\_092425

Collected Date/Time: 09/24/2025 13:02 - 09/24/2025 13:07

Matrix: Air

COC Reference: A011515

Analysis	Method	Run Date/Time	Batch ID	Prep ID	Surr	QC Types
<b>Organics - Volatiles</b>						
TO-15	TO-15	09/25/25 15:34	250925A8	GV250925G1	Yes	BLK/LCS/LCSD

# QC Report - Prep Batch Summary

## Organics - Volatiles, Prep Batch ID: GV250925G1

Surrogates: Yes, QC Types: BLK/LCS/LCSD

Sample ID	Analysis	Method	Run Date/Time	Batch ID
S79244.01	TO-15	TO-15	09/25/25 14:34	250925A8
S79244.02	TO-15	TO-15	09/25/25 15:04	250925A8
S79244.03	TO-15	TO-15	09/25/25 15:34	250925A8

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S79244.01

Sample Tag: SL-3\_092425

Collected Date/Time: 09/24/2025 12:13 - 09/24/2025 12:35

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 14:34, Matrix: G, Dilution: 10

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.3	60	140

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S79244.02

Sample Tag: SL-2\_092425

Collected Date/Time: 09/24/2025 12:47 - 09/24/2025 12:52

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 15:04, Matrix: G, Dilution: 10

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		95.5	60	140

# QC Report - Surrogates per Lab Sample

Lab Sample ID: S79244.03

Sample Tag: MH-1231\_092425

Collected Date/Time: 09/24/2025 13:02 - 09/24/2025 13:07

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 15:34, Matrix: G, Dilution: 10

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		93.3	60	140

# QC Report - Surrogates per QC Sample

## Organics - Volatiles, Prep Batch ID: GV250925G1

QC Types: BLK/LCS/LCSD

### Blank (BLK)

Lab Sample ID: 250925A8.BLKG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 14:04, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		94.4	60	140

### Laboratory Control Sample (LCS)

Lab Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:09, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		105.5	60	140

### Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 250925A8.LCSDG25A, Parent Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:38, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Surrogate	Flags	%Rec	LCL	UCL
4-Bromofluorobenzene		102.8	60	140

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79244.01

Sample Tag: SL-3\_092425

Collected Date/Time: 09/24/2025 12:13 - 09/24/2025 12:35

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 14:34, Matrix: G, Dilution: 10

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		97.2	60.0	140.0
1,4-Difluorobenzene		93.0	60.0	140.0
Chlorobenzene-D5		100.3	60.0	140.0

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79244.02

Sample Tag: SL-2\_092425

Collected Date/Time: 09/24/2025 12:47 - 09/24/2025 12:52

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 15:04, Matrix: G, Dilution: 10

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		98.2	60.0	140.0
1,4-Difluorobenzene		95.7	60.0	140.0
Chlorobenzene-D5		98.9	60.0	140.0

# QC Report - Internal Standards per Lab Sample

Lab Sample ID: S79244.03

Sample Tag: MH-1231\_092425

Collected Date/Time: 09/24/2025 13:02 - 09/24/2025 13:07

Matrix: Air

COC Reference: A011515

## Organics - Volatiles, Analysis: TO-15

Run in Batch: 250925A8, Run Date: 09/25/2025 15:34, Matrix: G, Dilution: 10

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		94.8	60.0	140.0
1,4-Difluorobenzene		89.3	60.0	140.0
Chlorobenzene-D5		95.9	60.0	140.0

# QC Report - Internal Standards per QC Sample

## Organics - Volatiles, Prep Batch ID: GV250925G1

QC Types: BLK/LCS/LCSD

### Blank (BLK)

Lab Sample ID: 250925A8.BLKG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 14:04, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		<b>102.7</b>	60.0	140.0
1,4-Difluorobenzene		<b>95.2</b>	60.0	140.0
Chlorobenzene-D5		<b>98.4</b>	60.0	140.0

### Laboratory Control Sample (LCS)

Lab Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:09, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		<b>100.0</b>	60.0	140.0
1,4-Difluorobenzene		<b>100.0</b>	60.0	140.0
Chlorobenzene-D5		<b>100.0</b>	60.0	140.0

### Laboratory Control Sample Duplicate (LCSD)

Lab Sample ID: 250925A8.LCSDG25A, Parent Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:38, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Internal Standard	Flags	%Rec	LCL	UCL
Bromochloromethane		<b>103.5</b>	60.0	140.0
1,4-Difluorobenzene		<b>102.2</b>	60.0	140.0
Chlorobenzene-D5		<b>103.7</b>	60.0	140.0

**QC Report - Batch QC Results**

**Organics - Volatiles, Prep Batch ID: GV250925G1**

Surrogates: Yes, QC Types: BLK/LCS/LCSD

**Blank (BLK)**

Lab Sample ID: 250925A8.BLKG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 14:04, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Analyte	Flags	Conc	RDL	MDL	Units
Trichloroethene		ND	0.20		ppbv
Tetrachloroethene		ND	0.20		ppbv
Vinyl chloride		ND	0.20		ppbv
cis-1,2-Dichloroethene		ND	0.20		ppbv
trans-1,2-Dichloroethene		ND	0.20		ppbv
1,1-Dichloroethene		ND	0.20		ppbv
1,4-Dioxane		ND	2.00		ppbv

**Laboratory Control Sample (LCS)**

Lab Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:09, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Analyte	Flags	Orig Conc	Spike	LCS Conc	% Rec	LCL	UCL
Trichloroethene		0.00	10.00	8.9408	89.4	70.0	130.0
Tetrachloroethene		0.00	10.00	9.6728	96.7	70.0	130.0
Vinyl chloride	*	0.00	10.00	6.7982	68.0	70.0	130.0
cis-1,2-Dichloroethene		0.00	10.00	9.7735	97.7	70.0	130.0
trans-1,2-Dichloroethene		0.00	10.00	9.7127	97.1	70.0	130.0
1,1-Dichloroethene		0.00	10.00	9.1882	91.9	70.0	130.0
1,4-Dioxane		0.00	10.00	10.1001	101.0	70.0	130.0

**Laboratory Control Sample Duplicate (LCSD)**

Lab Sample ID: 250925A8.LCSDG25A, Parent Sample ID: 250925A8.LCSG25A

Run in Batch: 250925A8, Run Date: 09/25/2025 12:38, Prep Date: 09/25/2025, Matrix: G, Dilution: 1

Analyte	Flags	Orig Conc	Spike	LCSD Conc	% Rec	LCL	UCL	LCS Conc	RPD	RPD CL
Trichloroethene		0.00	10.00	8.9908	89.9	70.0	130.0	8.9408	0.6	30.0
Tetrachloroethene		0.00	10.00	9.5653	95.7	70.0	130.0	9.6728	1.1	30.0
Vinyl chloride		0.00	10.00	7.0486	70.5	70.0	130.0	6.7982	3.6	30.0
cis-1,2-Dichloroethene		0.00	10.00	9.5895	95.9	70.0	130.0	9.7735	1.9	30.0
trans-1,2-Dichloroethene		0.00	10.00	9.6841	96.8	70.0	130.0	9.7127	0.3	30.0
1,1-Dichloroethene		0.00	10.00	9.2238	92.2	70.0	130.0	9.1882	0.4	30.0
1,4-Dioxane		0.00	10.00	10.3453	103.5	70.0	130.0	10.1001	2.4	30.0

# Merit Laboratories Login Checklist

Lab Set ID:S79244

Attention: Megan Meckley  
Address: ARCADIS U.S., Inc.  
28550 Cabot Drive, Suite 500  
Novi, MI 48377

Client:ARCADIS\_NOVI (ARCADIS U.S., Inc.)

Project: Ford LTP SSVE 30251157.901.04 E205162

Submitted:09/24/2025 15:25 Login User: MAM

Phone: O:301-304-8347 FAX:  
Email: megan.meckley@arcadis.com

Selection	Description	Note
-----------	-------------	------

## Sample Receiving

- |     |  |  |
|-----|--|--|
| 01. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Samples are received at 4C +/- 2C Thermometer # RT     |
| 02. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Received on ice/ cooling process begun                 |
| 03. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples shipped  |
| 04. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples left in 24 hr. drop box                        |
| 05. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Are there custody seals/tape or is the drop box locked |

## Chain of Custody

- |     |  |  |
|-----|--|--|
| 06. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC adequately filled out                |
| 07. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | COC signed and relinquished to the lab   |
| 08. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sample tag on bottles match COC          |
| 09. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Subcontracting needed? Subcontracted to: |

## Preservation

- |     |  |   |
|-----|--|---|
| 10. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Do sample have correct chemical preservation        |
| 11. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Completed pH checks on preserved samples? (no VOAs) |
| 12. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Did any samples need to be preserved in the lab?    |

## Bottle Conditions

- |     |  |   |
|-----|--|---|
| 13. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | All bottles intact                                  |
| 14. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Appropriate analytical bottles are used             |
| 15. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Merit bottles used                                  |
| 16. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Sufficient sample volume received                   |
| 17. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A | Samples require laboratory filtration               |
| 18. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Samples submitted within holding time               |
| 19. | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | Do water VOC, TOX, DO or Alkalinity bottles contain |

Corrective action for all exceptions is to call the client and to notify the project manager.

Client Review By: \_\_\_\_\_ Date: \_\_\_\_\_



2680 East Lansing Dr., East Lansing, MI 48823  
 Phone (517) 332-0167 Fax (517) 332-4034  
 www.meritlabs.com

C.O.C. PAGE # 1 OF 1

A 011515

**REPORT TO**

**AIR/GAS SAMPLES CHAIN OF CUSTODY RECORD**

**INVOICE TO**

CONTACT NAME: Megan Meckley  
 COMPANY: Arcadis  
 ADDRESS: 28550 Cabot Dr., Suite 500  
 CITY: Novi STATE: MI ZIP CODE: 48377  
 PHONE NO.: (717) 372-4153 FAX NO.: (989) 859-6645 P.O. NO.:  
 EMAIL ADDRESS: megan.meckley@arcadis.com/matt.williams@arcadis.com QUOTE NO.:

CONTACT NAME:  SAME  
 COMPANY:  
 ADDRESS:  
 CITY: STATE: ZIP CODE:  
 PHONE NO.: EMAIL ADDRESS:  
 ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: Ford LTP SSV 30251157.901.04 SAMPLER(S) - PLEASE PRINT/SIGN NAME: Kent Kusper / [Signature]  
 TURNAROUND TIME REQUIRED:  1 DAY  2 DAYS  3 DAYS  STANDARD  OTHER  
 DELIVERABLES REQUIRED:  LEVEL II  LEVEL III  LEVEL IV  EDD  OTHER

Certifications:  DoD  NELAP  
 Project Locations:  State of New York  Detroit, MI  
 Sample Type:  Indoor Air  Soil Gas  
 Analyses:  TO-15  TO-17  Other (specify in notes)

MERIT LAB NO. FOR LAB USE ONLY	SAMPLE TAG IDENTIFICATION-DESCRIPTION	Start		Stop		Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-17 Tube ID	TO-17 Sample Volume	Analyses			
		Date	Time	Date	Time							Indoor Air	Soil Gas	TO-15	TO-17
7924401	SL-3-092425	9/24/25	1213	9/24/25	1235	-30.0	-5.0	273	47649				X	X	
102	SL-2-092425	1	1247	1	1252	-30.0	-5.0	275	42831				X	X	
103	MH-123L-092425	1	1302	1	1307	-30.0	-5.0	412	46065				X	X	

Temperature (Fahrenheit)			Pressure (inches of Hg)		
Interior	Ambient	Notes	Interior	Ambient	Notes
Start			Start		
Stop			Stop		

Notes Report ONLY:  
 1,1-DCE PCE  
 1,4-Dioxane TCE  
 Cis-1,2-DCE VC  
 trans-1,2-DCE

RELINQUISHED BY: [Signature] / Arcadis DATE: 9/24/25 TIME: 1525  
 RECEIVED BY: [Signature] DATE: 9/24/25 TIME: 1525

RELINQUISHED BY: DATE: TIME:  
 RECEIVED BY: DATE: TIME:  
 SEAL NO. SEAL INTACT YES  NO  INITIALS  
 SEAL NO. SEAL INTACT YES  NO  INITIALS  
 TEMP. ON ARRIVAL: RT

**Analytical Report**

10/20/2025  
Ms. Megan Meckley  
Arcadis U.S., Inc.  
28550 Cabot Dr.  
Suite 500  
Novi MI 48377

Project Name: Ford LTP SSVE  
Project #: 30251157.901.04  
Workorder #: 2510198

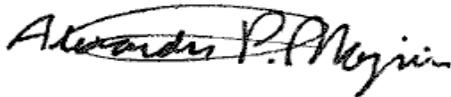
Dear Ms. Megan Meckley

The following report includes the data for the above referenced project for sample(s) received on 10/8/2025 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by TO-15 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: Alexander Mojica at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Alexander Mojica  
Project Manager

**WORK ORDER #: 2510198**

Work Order Summary

<b>CLIENT:</b>	Ms. Megan Meckley Arcadis U.S., Inc. 28550 Cabot Dr. Suite 500 Novi, MI 48377	<b>BILL TO:</b>	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 200 Highlands Ranch, CO 80129
<b>PHONE:</b>		<b>P.O. #</b>	US3460021697
<b>FAX:</b>		<b>PROJECT #</b>	30251157.901.04 Ford LTP SSVE
<b>DATE RECEIVED:</b>	10/08/2025	<b>CONTACT:</b>	Alexander Mojica
<b>DATE COMPLETED:</b>	10/20/2025		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	SSVE-INF-100625	TO-15	6.3 "Hg	10.1 psi
02A	SSVE-EFF-100625	TO-15	8.6 "Hg	9.9 psi
03A	MH-1231-100625	TO-15	7.1 "Hg	9.7 psi
04A	SL-2-100625	TO-15	7.8 "Hg	10 psi
05A	SL-3-100625	TO-15	7.3 "Hg	9.6 psi
06A	DUP-01-100625	TO-15	12.2 "Hg	9.9 psi
07A	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 10/20/25

Cert. No.: AZ Licensure-AZ0775, FL NELAP-E87680, LA NELAP-02089, MN NELAP-2836569, NH NELAP-209224-A, NJ NELAP-CA016, NY NELAP-11291, TX NELAP-T104704434, UT NELAP-CA009332023-16, VA NELAP-13180, WA NELAP-C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-21  
 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

**LABORATORY NARRATIVE**  
**EPA Method TO-15**  
**Arcadis U.S., Inc.**  
**Workorder# 2510198**

Six 1 Liter Summa Canister (100% Certified) samples were received on October 08, 2025. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

**Receiving Notes**

The Chain of Custody (COC) information for samples SSVE-INF-100625, SSVE-EFF-100625, MH-1231-100625, SL-2-100625, SL-3-100625 and DUP-01-100625 did not match the entries on the sample tags with regard to sample identification. Therefore the information on the COC was used to process and report the samples.

**Analytical Notes**

As per client project requirements, the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. Concentrations that are below the level at which the canister was certified may be false positives.

**Definition of Data Qualifying Flags**

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

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

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

M - Reported value may be biased due to apparent matrix interferences.

CN - See Case Narrative.

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

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	SSVE-INF-100625	<b>Date/Time Analyzed:</b>	10/17/25 08:56 PM
<b>Lab ID:</b>	2510198-01A	<b>Dilution Factor:</b>	2.14
<b>Date/Time Collected:</b>	10/6/25 12:56 PM	<b>Instrument/Filename:</b>	msdp.i / p101723
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.4	2.1	4.2	Not Detected
1,4-Dioxane	123-91-1	2.5	3.8	15	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.4	2.1	4.2	22
Tetrachloroethene	127-18-4	2.5	3.6	7.2	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.4	2.1	4.2	2.4 J
Trichloroethene	79-01-6	2.0	2.9	5.8	3.3 J
Vinyl Chloride	75-01-4	0.93	1.4	2.7	17

J = Estimated value.

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	107
4-Bromofluorobenzene	460-00-4	70-130	89
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	SSVE-EFF-100625	<b>Date/Time Analyzed:</b>	10/17/25 08:30 PM
<b>Lab ID:</b>	2510198-02A	<b>Dilution Factor:</b>	2.34
<b>Date/Time Collected:</b>	10/6/25 12:55 PM	<b>Instrument/Filename:</b>	msdp.i / p101722
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.6	2.3	4.6	Not Detected
1,4-Dioxane	123-91-1	2.8	4.2	17	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.6	2.3	4.6	Not Detected
Tetrachloroethene	127-18-4	2.7	4.0	7.9	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.6	2.3	4.6	Not Detected
Trichloroethene	79-01-6	2.1	3.1	6.3	Not Detected
Vinyl Chloride	75-01-4	1.0	1.5	3.0	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	116
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	108

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	MH-1231-100625	<b>Date/Time Analyzed:</b>	10/17/25 09:22 PM
<b>Lab ID:</b>	2510198-03A	<b>Dilution Factor:</b>	2.17
<b>Date/Time Collected:</b>	10/6/25 12:27 PM	<b>Instrument/Filename:</b>	msdp.i / p101724
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	2.6	3.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.2	4.3	Not Detected
Tetrachloroethene	127-18-4	2.5	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	2.2	4.3	Not Detected
Trichloroethene	79-01-6	2.0	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.94	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	111
4-Bromofluorobenzene	460-00-4	70-130	92
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	SL-2-100625	<b>Date/Time Analyzed:</b>	10/17/25 09:48 PM
<b>Lab ID:</b>	2510198-04A	<b>Dilution Factor:</b>	2.27
<b>Date/Time Collected:</b>	10/6/25 12:00 PM	<b>Instrument/Filename:</b>	msdp.i / p101725
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.5	Not Detected
1,4-Dioxane	123-91-1	2.7	4.1	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.2	4.5	Not Detected
Tetrachloroethene	127-18-4	2.6	3.8	7.7	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	2.2	4.5	Not Detected
Trichloroethene	79-01-6	2.1	3.0	6.1	Not Detected
Vinyl Chloride	75-01-4	0.99	1.4	2.9	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	112
4-Bromofluorobenzene	460-00-4	70-130	88
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	SL-3-100625	<b>Date/Time Analyzed:</b>	10/17/25 10:40 PM
<b>Lab ID:</b>	2510198-05A	<b>Dilution Factor:</b>	2.18
<b>Date/Time Collected:</b>	10/6/25 11:41 AM	<b>Instrument/Filename:</b>	msdp.i / p101727
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.5	2.2	4.3	Not Detected
1,4-Dioxane	123-91-1	2.6	3.9	16	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.5	2.2	4.3	Not Detected
Tetrachloroethene	127-18-4	2.5	3.7	7.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.5	2.2	4.3	Not Detected
Trichloroethene	79-01-6	2.0	2.9	5.8	Not Detected
Vinyl Chloride	75-01-4	0.95	1.4	2.8	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	115
4-Bromofluorobenzene	460-00-4	70-130	87
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	DUP-01-100625	<b>Date/Time Analyzed:</b>	10/17/25 10:14 PM
<b>Lab ID:</b>	2510198-06A	<b>Dilution Factor:</b>	2.82
<b>Date/Time Collected:</b>	10/6/25 12:00 AM	<b>Instrument/Filename:</b>	msdp.i / p101726
<b>Media:</b>	1 Liter Summa Canister (100% Certified)		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	1.9	2.8	5.6	Not Detected
1,4-Dioxane	123-91-1	3.4	5.1	20	Not Detected
cis-1,2-Dichloroethene	156-59-2	1.9	2.8	5.6	Not Detected
Tetrachloroethene	127-18-4	3.2	4.8	9.6	Not Detected
trans-1,2-Dichloroethene	156-60-5	1.9	2.8	5.6	Not Detected
Trichloroethene	79-01-6	2.6	3.8	7.6	Not Detected
Vinyl Chloride	75-01-4	1.2	1.8	3.6	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	114
4-Bromofluorobenzene	460-00-4	70-130	87
Toluene-d8	2037-26-5	70-130	106

EPA METHOD TO-15 GC/MS FULL SCAN  
Ford LTP SSVE

<b>Client ID:</b>	Lab Blank	<b>Date/Time Analyzed:</b>	10/17/25 06:15 PM
<b>Lab ID:</b>	2510198-07A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collected:</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p101720d
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	MDL (ug/m3)	LOD (ug/m3)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	75-35-4	0.67	0.99	2.0	Not Detected
1,4-Dioxane	123-91-1	1.2	1.8	7.2	Not Detected
cis-1,2-Dichloroethene	156-59-2	0.67	0.99	2.0	Not Detected
Tetrachloroethene	127-18-4	1.2	1.7	3.4	Not Detected
trans-1,2-Dichloroethene	156-60-5	0.67	0.99	2.0	Not Detected
Trichloroethene	79-01-6	0.91	1.3	2.7	Not Detected
Vinyl Chloride	75-01-4	0.43	0.64	1.3	Not Detected

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	108
4-Bromofluorobenzene	460-00-4	70-130	86
Toluene-d8	2037-26-5	70-130	104

EPA METHOD TO-15 GC/MS FULL SCAN  
 Ford LTP SSVE

<b>Client ID:</b>	CCV	<b>Date/Time Analyzed:</b>	10/17/25 04:57 PM
<b>Lab ID:</b>	2510198-08A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collected:</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p101717
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	95
1,4-Dioxane	123-91-1	111
cis-1,2-Dichloroethene	156-59-2	97
Tetrachloroethene	127-18-4	94
trans-1,2-Dichloroethene	156-60-5	99
Trichloroethene	79-01-6	103
Vinyl Chloride	75-01-4	100

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	110
4-Bromofluorobenzene	460-00-4	70-130	97
Toluene-d8	2037-26-5	70-130	110

EPA METHOD TO-15 GC/MS FULL SCAN  
 Ford LTP SSVE

<b>Client ID:</b>	LCS	<b>Date/Time Analyzed:</b>	10/17/25 05:23 PM
<b>Lab ID:</b>	2510198-09A	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collected:</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p101718
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	90
1,4-Dioxane	123-91-1	91
cis-1,2-Dichloroethene	156-59-2	98
Tetrachloroethene	127-18-4	95
trans-1,2-Dichloroethene	156-60-5	101
Trichloroethene	79-01-6	102
Vinyl Chloride	75-01-4	108

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	118
4-Bromofluorobenzene	460-00-4	70-130	93
Toluene-d8	2037-26-5	70-130	105

\* % Recovery is calculated using unrounded analytical results.

EPA METHOD TO-15 GC/MS FULL SCAN  
 Ford LTP SSVE

<b>Client ID:</b>	LCSD	<b>Date/Time Analyzed:</b>	10/17/25 05:49 PM
<b>Lab ID:</b>	2510198-09AA	<b>Dilution Factor:</b>	1.00
<b>Date/Time Collected:</b>	NA - Not Applicable	<b>Instrument/Filename:</b>	msdp.i / p101719
<b>Media:</b>	NA - Not Applicable		

Compound	CAS#	%Recovery
1,1-Dichloroethene	75-35-4	87
1,4-Dioxane	123-91-1	92
cis-1,2-Dichloroethene	156-59-2	94
Tetrachloroethene	127-18-4	100
trans-1,2-Dichloroethene	156-60-5	100
Trichloroethene	79-01-6	104
Vinyl Chloride	75-01-4	103

D: Analyte not within the DoD scope of accreditation.

Surrogates	CAS#	Limits	%Recovery
1,2-Dichloroethane-d4	17060-07-0	70-130	109
4-Bromofluorobenzene	460-00-4	70-130	98
Toluene-d8	2037-26-5	70-130	106

\* % Recovery is calculated using unrounded analytical results.

**Method : TO-15 (Sh)-1,1-DCE, 1,4-Dioxane, c/t-1,2-DCE, PCE, TCE & VC**

<b>CAS Number</b>	<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>
75-35-4	1,1-Dichloroethene	0.50
123-91-1	1,4-Dioxane	2.0
156-59-2	cis-1,2-Dichloroethene	0.50
156-60-5	trans-1,2-Dichloroethene	0.50
127-18-4	Tetrachloroethene	0.50
79-01-6	Trichloroethene	0.50
75-01-4	Vinyl Chloride	0.50

	<b>Surrogate</b>	<b>Method Limits</b>
2037-26-5	Toluene-d8	70-130
17060-07-0	1,2-Dichloroethane-d4	70-130
460-00-4	4-Bromofluorobenzene	70-130