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ANALYTICAL REPORT

Eurofins Canton
180 S. Van Buren Avenue
Barberton, OH 44203
Tel: (330)497-9396

Laboratory Job ID: 240-166782-1
Client Project/Site: Ford LTP - On Site

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Authorized for release by:
5/31/2022 2:15:14 PM

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Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

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Laboratory: Eurofins Canton

Narrative

Job Narrative
240-166782-1

Comments
No additional comments.

Receipt
The samples were received on 5/18/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1º C and 0.2º C.

GC/MS VOA
Method 8260D SIM: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-29_051622 (240-166782-4), DUP-01 (240-166782-7) and DUP-05 (240-166782-8). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
8260D SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030C	Purge and Trap	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-166782-1	TRIP BLANK_154	Water	05/16/22 00:00	05/18/22 08:00
240-166782-2	MW-196S_051622	Water	05/16/22 10:05	05/18/22 08:00
240-166782-3	MW-196_051622	Water	05/16/22 11:10	05/18/22 08:00
240-166782-4	MW-29_051622	Water	05/16/22 12:27	05/18/22 08:00
240-166782-5	MW-198S_051622	Water	05/16/22 13:55	05/18/22 08:00
240-166782-6	MW-198_051622	Water	05/16/22 15:03	05/18/22 08:00
240-166782-7	DUP-01	Water	05/16/22 00:00	05/18/22 08:00
240-166782-8	DUP-05	Water	05/16/22 00:00	05/18/22 08:00

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: TRIP BLANK_154 — Lab Sample ID: 240-166782-1

No Detections.

Client Sample ID: MW-196S_051622 — Lab Sample ID: 240-166782-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	50		2.0	0.92	ug/L	2		8260D	Total/NA
trans-1,2-Dichloroethene	1.6	J	2.0	1.0	ug/L	2		8260D	Total/NA
Trichloroethene	86		2.0	0.88	ug/L	2		8260D	Total/NA

Client Sample ID: MW-196_051622 — Lab Sample ID: 240-166782-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	250		13	5.8	ug/L	12.5		8260D	Total/NA
trans-1,2-Dichloroethene	94		13	6.4	ug/L	12.5		8260D	Total/NA
Trichloroethene	470		13	5.5	ug/L	12.5		8260D	Total/NA

Client Sample ID: MW-29_051622 — Lab Sample ID: 240-166782-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.2		4.0	1.7	ug/L	2		8260D SIM	Total/NA
Vinyl chloride	1.1		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: MW-198S_051622 — Lab Sample ID: 240-166782-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.46	J	1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: MW-198_051622 — Lab Sample ID: 240-166782-6

No Detections.

Client Sample ID: DUP-01 — Lab Sample ID: 240-166782-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	4.7		4.0	1.7	ug/L	2		8260D SIM	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-05 — Lab Sample ID: 240-166782-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	44		1.7	0.77	ug/L	1.667		8260D	Total/NA
trans-1,2-Dichloroethene	1.3	J	1.7	0.85	ug/L	1.667		8260D	Total/NA
Trichloroethene	79		1.7	0.73	ug/L	1.667		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: TRIP BLANK_154

Date Collected: 05/16/22 00:00
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-1

Matrix: Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 15:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 15:59	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 15:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 15:59	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 15:59	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/26/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*62 - 137*		*05/26/22 15:59*	*1*
4-Bromofluorobenzene (Surr)	*95*		*56 - 136*		*05/26/22 15:59*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*05/26/22 15:59*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/26/22 15:59*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: MW-196S_051622
Date Collected: 05/16/22 10:05
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-2
Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/24/22 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*66 - 120*		*05/24/22 23:36*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			05/25/22 20:36	2
cis-1,2-Dichloroethene	**50**		2.0	0.92	ug/L			05/25/22 20:36	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			05/25/22 20:36	2
trans-1,2-Dichloroethene	**1.6**	**J**	2.0	1.0	ug/L			05/25/22 20:36	2
Trichloroethene	**86**		2.0	0.88	ug/L			05/25/22 20:36	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			05/25/22 20:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*62 - 137*		*05/25/22 20:36*	*2*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/25/22 20:36*	*2*
Toluene-d8 (Surr)	*104*		*78 - 122*		*05/25/22 20:36*	*2*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/25/22 20:36*	*2*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: MW-196_051622

Date Collected: 05/16/22 11:10
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-3

Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/25/22 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*66 - 120*		*05/25/22 00:01*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	13	U	13	6.1	ug/L			05/25/22 21:00	12.5
cis-1,2-Dichloroethene	**250**		13	5.8	ug/L			05/25/22 21:00	12.5
Tetrachloroethene	13	U	13	5.5	ug/L			05/25/22 21:00	12.5
trans-1,2-Dichloroethene	**94**		13	6.4	ug/L			05/25/22 21:00	12.5
Trichloroethene	**470**		13	5.5	ug/L			05/25/22 21:00	12.5
Vinyl chloride	13	U	13	5.6	ug/L			05/25/22 21:00	12.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*		*05/25/22 21:00*	*12.5*
4-Bromofluorobenzene (Surr)	*105*		*56 - 136*		*05/25/22 21:00*	*12.5*
Toluene-d8 (Surr)	*104*		*78 - 122*		*05/25/22 21:00*	*12.5*
Dibromofluoromethane (Surr)	*107*		*73 - 120*		*05/25/22 21:00*	*12.5*

Client Sample ID: MW-29_051622

Date Collected: 05/16/22 12:27
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-4

Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.2**		4.0	1.7	ug/L			05/25/22 00:26	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/25/22 00:26*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 19:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 19:57	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 19:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 19:57	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 19:57	1
Vinyl chloride	**1.1**		1.0	0.45	ug/L			05/26/22 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/26/22 19:57*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/26/22 19:57*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/26/22 19:57*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/26/22 19:57*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: MW-198S_051622

Date Collected: 05/16/22 13:55
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-5

Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/25/22 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*05/25/22 00:51*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 20:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 20:20	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 20:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 20:20	1
Trichloroethene	**0.46**	**J**	1.0	0.44	ug/L			05/26/22 20:20	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/26/22 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/26/22 20:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*56 - 136*		*05/26/22 20:20*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/26/22 20:20*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/26/22 20:20*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: MW-198_051622

Date Collected: 05/16/22 15:03
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-6

Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/25/22 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*66 - 120*		*05/25/22 01:16*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 20:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 20:44	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 20:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 20:44	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 20:44	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/26/22 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/26/22 20:44*	*1*
4-Bromofluorobenzene (Surr)	*90*		*56 - 136*		*05/26/22 20:44*	*1*
Toluene-d8 (Surr)	*96*		*78 - 122*		*05/26/22 20:44*	*1*
Dibromofluoromethane (Surr)	*97*		*73 - 120*		*05/26/22 20:44*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: DUP-01
Date Collected: 05/16/22 00:00
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-7
Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.7**		4.0	1.7	ug/L			05/25/22 01:40	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*66 - 120*		*05/25/22 01:40*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 21:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 21:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 21:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 21:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 21:08	1
Vinyl chloride	**1.0**		1.0	0.45	ug/L			05/26/22 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*		*05/26/22 21:08*	*1*
4-Bromofluorobenzene (Surr)	*91*		*56 - 136*		*05/26/22 21:08*	*1*
Toluene-d8 (Surr)	*95*		*78 - 122*		*05/26/22 21:08*	*1*
Dibromofluoromethane (Surr)	*98*		*73 - 120*		*05/26/22 21:08*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: DUP-05

Date Collected: 05/16/22 00:00
Date Received: 05/18/22 08:00

Lab Sample ID: 240-166782-8

Matrix: Water

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			05/25/22 02:05	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*66 - 120*		*05/25/22 02:05*	*2*

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.7	U	1.7	0.82	ug/L			05/26/22 21:31	1.667
cis-1,2-Dichloroethene	**44**		1.7	0.77	ug/L			05/26/22 21:31	1.667
Tetrachloroethene	1.7	U	1.7	0.73	ug/L			05/26/22 21:31	1.667
trans-1,2-Dichloroethene	**1.3**	**J**	1.7	0.85	ug/L			05/26/22 21:31	1.667
Trichloroethene	**79**		1.7	0.73	ug/L			05/26/22 21:31	1.667
Vinyl chloride	1.7	U	1.7	0.75	ug/L			05/26/22 21:31	1.667

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*62 - 137*		*05/26/22 21:31*	*1.667*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/26/22 21:31*	*1.667*
Toluene-d8 (Surr)	*98*		*78 - 122*		*05/26/22 21:31*	*1.667*
Dibromofluoromethane (Surr)	*99*		*73 - 120*		*05/26/22 21:31*	*1.667*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(62-137)	(56-136)	(78-122)	(73-120)
240-166782-1	TRIP BLANK_154	94	95	100	100
240-166782-2	MW-196S_051622	100	105	104	107
240-166782-3	MW-196_051622	101	105	104	107
240-166782-3 MS	MW-196_051622	92	104	105	100
240-166782-3 MSD	MW-196_051622	91	101	103	99
240-166782-4	MW-29_051622	93	91	96	98
240-166782-5	MW-198S_051622	95	93	96	98
240-166782-6	MW-198_051622	92	90	96	97
240-166782-7	DUP-01	92	91	95	98
240-166782-8	DUP-05	95	94	98	99
240-166933-D-2 MS	Matrix Spike	92	101	102	98
240-166933-G-2 MSD	Matrix Spike Duplicate	90	102	103	98
LCS 240-527906/5	Lab Control Sample	96	107	110	105
LCS 240-528104/5	Lab Control Sample	87	98	101	94
MB 240-527906/8	Method Blank	102	108	108	109
MB 240-528104/7	Method Blank	93	94	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		DCA
Lab Sample ID	Client Sample ID	(66-120)
240-166782-2	MW-196S_051622	105
240-166782-3	MW-196_051622	104
240-166782-4	MW-29_051622	107
240-166782-5	MW-198S_051622	107
240-166782-6	MW-198_051622	109
240-166782-7	DUP-01	108
240-166782-8	DUP-05	106
240-166878-I-2 MS	Matrix Spike	102
240-166878-O-2 MSD	Matrix Spike Duplicate	102
LCS 240-527794/3	Lab Control Sample	103
MB 240-527794/4	Method Blank	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 240-527906/8
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/25/22 13:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/25/22 13:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/25/22 13:04	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/25/22 13:04	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/25/22 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*62 - 137*		*05/25/22 13:04*	*1*
4-Bromofluorobenzene (Surr)	*108*		*56 - 136*		*05/25/22 13:04*	*1*
Toluene-d8 (Surr)	*108*		*78 - 122*		*05/25/22 13:04*	*1*
Dibromofluoromethane (Surr)	*109*		*73 - 120*		*05/25/22 13:04*	*1*

Lab Sample ID: LCS 240-527906/5
Matrix: Water
Analysis Batch: 527906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	25.0	25.7		ug/L		103	63 - 134
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	77 - 123
Tetrachloroethene	25.0	26.3		ug/L		105	76 - 123
trans-1,2-Dichloroethene	25.0	24.9		ug/L		100	75 - 124
Trichloroethene	25.0	26.1		ug/L		104	70 - 122
Vinyl chloride	25.0	23.0		ug/L		92	60 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene (Surr)	*107*		*56 - 136*
Toluene-d8 (Surr)	*110*		*78 - 122*
Dibromofluoromethane (Surr)	*105*		*73 - 120*

Lab Sample ID: 240-166782-3 MS
Matrix: Water
Analysis Batch: 527906

Client Sample ID: MW-196_051622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	13	U	313	304		ug/L		97	56 - 135
cis-1,2-Dichloroethene	250		313	526		ug/L		87	66 - 128
Tetrachloroethene	13	U	313	294		ug/L		94	62 - 131
trans-1,2-Dichloroethene	94		313	381		ug/L		92	56 - 136
Trichloroethene	470		313	734		ug/L		84	61 - 124
Vinyl chloride	13	U	313	274		ug/L		88	43 - 157

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*104*		*56 - 136*
Toluene-d8 (Surr)	*105*		*78 - 122*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 240-166782-3 MS
Matrix: Water
Analysis Batch: 527906

Client Sample ID: MW-196_051622
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*100*		*73 - 120*

Lab Sample ID: 240-166782-3 MSD
Matrix: Water
Analysis Batch: 527906

Client Sample ID: MW-196_051622
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	13	U	313	302		ug/L		97	56 - 135	1	26
cis-1,2-Dichloroethene	250		313	525		ug/L		87	66 - 128	0	14
Tetrachloroethene	13	U	313	295		ug/L		94	62 - 131	0	20
trans-1,2-Dichloroethene	94		313	377		ug/L		91	56 - 136	1	15
Trichloroethene	470		313	734		ug/L		84	61 - 124	0	15
Vinyl chloride	13	U	313	275		ug/L		88	43 - 157	0	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*91*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*103*		*78 - 122*
Dibromofluoromethane (Surr)	*99*		*73 - 120*

Lab Sample ID: MB 240-528104/7
Matrix: Water
Analysis Batch: 528104

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/26/22 14:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/26/22 14:00	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 14:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/26/22 14:00	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/26/22 14:00	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/26/22 14:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*93*		*62 - 137*		*05/26/22 14:00*	*1*
4-Bromofluorobenzene (Surr)	*94*		*56 - 136*		*05/26/22 14:00*	*1*
Toluene-d8 (Surr)	*100*		*78 - 122*		*05/26/22 14:00*	*1*
Dibromofluoromethane (Surr)	*100*		*73 - 120*		*05/26/22 14:00*	*1*

Lab Sample ID: LCS 240-528104/5
Matrix: Water
Analysis Batch: 528104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	25.0	25.0		ug/L		100	63 - 134
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	77 - 123
Tetrachloroethene	25.0	25.8		ug/L		103	76 - 123
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	75 - 124
Trichloroethene	25.0	25.3		ug/L		101	70 - 122

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 240-528104/5
Matrix: Water
Analysis Batch: 528104

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			25.0	22.9		ug/L		91	60 - 144		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*62 - 137*
4-Bromofluorobenzene (Surr)	*98*		*56 - 136*
Toluene-d8 (Surr)	*101*		*78 - 122*
Dibromofluoromethane (Surr)	*94*		*73 - 120*

Lab Sample ID: 240-166933-D-2 MS
Matrix: Water
Analysis Batch: 528104

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	1.0	U	25.0	24.7		ug/L		99	56 - 135		
cis-1,2-Dichloroethene	1.0	U	25.0	23.3		ug/L		93	66 - 128		
Tetrachloroethene	1.0	U	25.0	24.1		ug/L		96	62 - 131		
trans-1,2-Dichloroethene	1.0	U	25.0	23.3		ug/L		93	56 - 136		
Trichloroethene	1.0	U	25.0	24.2		ug/L		97	61 - 124		
Vinyl chloride	1.0	U	25.0	22.4		ug/L		90	43 - 157		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*
4-Bromofluorobenzene (Surr)	*101*		*56 - 136*
Toluene-d8 (Surr)	*102*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Lab Sample ID: 240-166933-G-2 MSD
Matrix: Water
Analysis Batch: 528104

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	25.0	23.8		ug/L		95	56 - 135	4	26
cis-1,2-Dichloroethene	1.0	U	25.0	23.2		ug/L		93	66 - 128	0	14
Tetrachloroethene	1.0	U	25.0	23.2		ug/L		93	62 - 131	4	20
trans-1,2-Dichloroethene	1.0	U	25.0	22.8		ug/L		91	56 - 136	2	15
Trichloroethene	1.0	U	25.0	23.6		ug/L		94	61 - 124	3	15
Vinyl chloride	1.0	U	25.0	22.2		ug/L		89	43 - 157	1	24

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*62 - 137*
4-Bromofluorobenzene (Surr)	*102*		*56 - 136*
Toluene-d8 (Surr)	*103*		*78 - 122*
Dibromofluoromethane (Surr)	*98*		*73 - 120*

Method: 8260D SIM - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-527794/4
Matrix: Water
Analysis Batch: 527794

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/24/22 20:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*66 - 120*		*05/24/22 20:24*	*1*

Lab Sample ID: LCS 240-527794/3
Matrix: Water
Analysis Batch: 527794

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			10.0	9.50		ug/L		95	80 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*

Lab Sample ID: 240-166878-I-2 MS
Matrix: Water
Analysis Batch: 527794

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	2.0	U	10.0	10.6		ug/L		106	51 - 153		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*

Lab Sample ID: 240-166878-O-2 MSD
Matrix: Water
Analysis Batch: 527794

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	2.0	U	10.0	10.0		ug/L		100	51 - 153	5	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*66 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

GC/MS VOA

Analysis Batch: 527794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166782-2	MW-196S_051622	Total/NA	Water	8260D SIM	
240-166782-3	MW-196_051622	Total/NA	Water	8260D SIM	
240-166782-4	MW-29_051622	Total/NA	Water	8260D SIM	
240-166782-5	MW-198S_051622	Total/NA	Water	8260D SIM	
240-166782-6	MW-198_051622	Total/NA	Water	8260D SIM	
240-166782-7	DUP-01	Total/NA	Water	8260D SIM	
240-166782-8	DUP-05	Total/NA	Water	8260D SIM	
MB 240-527794/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-527794/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166878-I-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-166878-O-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

Analysis Batch: 527906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166782-2	MW-196S_051622	Total/NA	Water	8260D	
240-166782-3	MW-196_051622	Total/NA	Water	8260D	
MB 240-527906/8	Method Blank	Total/NA	Water	8260D	
LCS 240-527906/5	Lab Control Sample	Total/NA	Water	8260D	
240-166782-3 MS	MW-196_051622	Total/NA	Water	8260D	
240-166782-3 MSD	MW-196_051622	Total/NA	Water	8260D	

Analysis Batch: 528104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166782-1	TRIP BLANK_154	Total/NA	Water	8260D	
240-166782-4	MW-29_051622	Total/NA	Water	8260D	
240-166782-5	MW-198S_051622	Total/NA	Water	8260D	
240-166782-6	MW-198_051622	Total/NA	Water	8260D	
240-166782-7	DUP-01	Total/NA	Water	8260D	
240-166782-8	DUP-05	Total/NA	Water	8260D	
MB 240-528104/7	Method Blank	Total/NA	Water	8260D	
LCS 240-528104/5	Lab Control Sample	Total/NA	Water	8260D	
240-166933-D-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-166933-G-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: TRIP BLANK_154
Lab Sample ID: 240-166782-1
Date Collected: 05/16/22 00:00
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528104	05/26/22 15:59	SAM	TAL CAN

Client Sample ID: MW-196S_051622
Lab Sample ID: 240-166782-2
Date Collected: 05/16/22 10:05
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	527906	05/25/22 20:36	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527794	05/24/22 23:36	CS	TAL CAN

Client Sample ID: MW-196_051622
Lab Sample ID: 240-166782-3
Date Collected: 05/16/22 11:10
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		12.5	527906	05/25/22 21:00	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527794	05/25/22 00:01	CS	TAL CAN

Client Sample ID: MW-29_051622
Lab Sample ID: 240-166782-4
Date Collected: 05/16/22 12:27
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528104	05/26/22 19:57	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		2	527794	05/25/22 00:26	CS	TAL CAN

Client Sample ID: MW-198S_051622
Lab Sample ID: 240-166782-5
Date Collected: 05/16/22 13:55
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528104	05/26/22 20:20	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527794	05/25/22 00:51	CS	TAL CAN

Client Sample ID: MW-198_051622
Lab Sample ID: 240-166782-6
Date Collected: 05/16/22 15:03
Matrix: Water
Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528104	05/26/22 20:44	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		1	527794	05/25/22 01:16	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Client Sample ID: DUP-01

Lab Sample ID: 240-166782-7

Date Collected: 05/16/22 00:00

Matrix: Water

Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528104	05/26/22 21:08	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		2	527794	05/25/22 01:40	CS	TAL CAN

Client Sample ID: DUP-05

Lab Sample ID: 240-166782-8

Date Collected: 05/16/22 00:00

Matrix: Water

Date Received: 05/18/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1.667	528104	05/26/22 21:31	SAM	TAL CAN
Total/NA	Analysis	8260D SIM		2	527794	05/25/22 02:05	CS	TAL CAN

Laboratory References:

TAL CAN = Eurofins Canton, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP - On Site

Job ID: 240-166782-1

Laboratory: Eurofins Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22 *
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-23-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-22-16	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

MICHIGAN 190

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratory location: Brighton — 10448 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

TestAmerica Laboratories, Inc.

Client Contact	Regulatory program:	Client Project Manager: Kris Hinskey	Site Contact: Christina Weaver	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis	☐ DW ☐ NPDES ☐ RCRA ☐ Other	Telephone: 269-832-7478	Telephone: 248-994-2329	Telephone: 330-966-9783	1 of 1 COCs
Address: 28550 Cabot Drive, Suite 500		Email: Kristoffer.Hinskey@arcadis.com	Analysis Turnaround Time		For lab use only
City/State/Zip: Novi, MI, 48377		Sampler Name: Sommer Guy	TAT if different from below: ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day; 10 day		Walk-in client
Phone: 248-994-2240		Method of Shipment/Carrier:			Lab sampling
Project Name: Ford LTP On-Site		Shipping/Tracking No:			Job/SDG No:
Project Number: 30080642.401.03					
PO # 30080642.401.03					

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	1,1-DCE 8260D	cis-1,2-DCE 8260D	Trans-1,2-DCE 8260D	PCE 8260D	TCE 8260D	Vinyl Chloride 8260D	1,4-Dioxane 8260D SIM	Sample Specific Notes / Special Instructions:
TRIP BLANK_154	—	—		1						1					N	G	X	X	X	X	X	X		1 Trip Blank
MW-196S_051622	5/16/22	1005		6						6					N	G	X	X	X	X	X	X	X	3 VOAs for 8260D 3 VOAs for 8260D SIM
MW-196_051622	5/16/22	1110		6						6					N	G	X	X	X	X	X	X	X	" "
MW-29_051622	5/16/22	1227		6						6					N	G	X	X	X	X	X	X	X	" "
MW-198S_051622	5/16/22	1355		6						6					N	G	X	X	X	X	X	X	X	" "
MW-198_051622	5/16/22	1503		6						6					N	G	X	X	X	X	X	X	X	" "
DUP-01	5/16/22	—		6						6					N	G	X	X	X	X	X	X	X	" "
DUP-05	5/16/22	—		6						6					N	G	X	X	X	X	X	X	X	" "
SG 5/16																								

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer): ☐ Return to Client ☑ Disposal By Lab ☐ Archive For

240-166782 Chain of Custody

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
Level IV Reporting requested.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sommer Guy	Arcadis	5/16/22 1615	Novi Cold Storage	Arcadis	5/16/22 1615
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	ARCADIS	5/17/22 1100		FEDEX	5/17/22 1100
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
	FEDEX	5/17/22 1130			

5/31/2022

Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166482
Canton Facility

Client Arcadis Site Name Ford LTP
Cooler Received on 5-18-22 Opened on 5-18-22
FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other
Cooler unpacked by: (DMR)

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # TA Foam Box Client Cooler Box Other
Packing material used: (Bubble Wrap) Foam Plastic Bag None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☒ See Multiple Cooler Form
   IR GUN# IR-13 (CF 0.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF -0.7°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? Yes (No)
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? (Yes) No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? (Yes) No
11. Sufficient quantity received to perform indicated analyses? (Yes) No
12. Are these work share samples and all listed on the COC? Yes (No)
    If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# HC157842
14. Were VOAs on the COC? (Yes) No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. (Yes) No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0104 2016 (Yes) No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) DUP-05 1x40mL Vial was received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 166782

Eurofins - Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(TA) Client Box Other	(IR-13) IR-15	0.2	~~[illegible]~~ 0.2	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-13) IR-15	0.1	0.1	(Wet Ice) Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-13 IR-15			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers