

ANALYTICAL REPORT

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

Laboratory Job ID: 240-166341-1
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:
5/25/2022 10:50:50 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

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

Job ID: 240-166341-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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.
α	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

Job ID: 240-166341-1

Job ID: 240-166341-1

Laboratory: Eurofins Canton

Narrative

**Job Narrative
240-166341-1**

Comments

No additional comments.

Receipt

The samples were received on 5/11/2022 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3° C.

GC/MS VOA

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

VOA Prep

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

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Method Summary

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

Job ID: 240-166341-1

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: 240-166341-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-166341-1	TRIP BLANK_71	Water	05/09/22 00:00	05/11/22 08:00
240-166341-2	MW-201_050922	Water	05/09/22 13:50	05/11/22 08:00
240-166341-3	MW-201S_050922	Water	05/09/22 15:15	05/11/22 08:00
240-166341-4	MW-224S_050922	Water	05/09/22 17:12	05/11/22 08:00

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Detection Summary

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

Job ID: 240-166341-1

Client Sample ID: TRIP BLANK_71

Lab Sample ID: 240-166341-1

No Detections.

Client Sample ID: MW-201_050922

Lab Sample ID: 240-166341-2

No Detections.

Client Sample ID: MW-201S_050922

Lab Sample ID: 240-166341-3

No Detections.

Client Sample ID: MW-224S_050922

Lab Sample ID: 240-166341-4

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Canton

Client Sample Results

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

Job ID: 240-166341-1

Client Sample ID: TRIP BLANK_71

Lab Sample ID: 240-166341-1

Date Collected: 05/09/22 00:00

Matrix: Water

Date Received: 05/11/22 08:00

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			05/17/22 15:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/17/22 15:31	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 15:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/17/22 15:31	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 15:31	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/17/22 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		62 - 137		05/17/22 15:31	1
4-Bromofluorobenzene (Surr)	101		56 - 136		05/17/22 15:31	1
Toluene-d8 (Surr)	102		78 - 122		05/17/22 15:31	1
Dibromofluoromethane (Surr)	91		73 - 120		05/17/22 15:31	1

Client Sample Results

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

Job ID: 240-166341-1

Client Sample ID: MW-201_050922

Lab Sample ID: 240-166341-2

Date Collected: 05/09/22 13:50

Matrix: Water

Date Received: 05/11/22 08:00

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			05/13/22 21:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		66 - 120					05/13/22 21:17	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			05/17/22 15:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/17/22 15:53	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 15:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/17/22 15:53	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 15:53	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/17/22 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		62 - 137					05/17/22 15:53	1
4-Bromofluorobenzene (Surr)	103		56 - 136					05/17/22 15:53	1
Toluene-d8 (Surr)	104		78 - 122					05/17/22 15:53	1
Dibromofluoromethane (Surr)	92		73 - 120					05/17/22 15:53	1

Client Sample Results

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

Job ID: 240-166341-1

Client Sample ID: MW-201S_050922

Lab Sample ID: 240-166341-3

Date Collected: 05/09/22 15:15

Matrix: Water

Date Received: 05/11/22 08:00

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			05/13/22 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 120					05/13/22 22:29	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			05/17/22 17:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/17/22 17:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/17/22 17:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 17:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/17/22 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		62 - 137					05/17/22 17:22	1
4-Bromofluorobenzene (Surr)	103		56 - 136					05/17/22 17:22	1
Toluene-d8 (Surr)	104		78 - 122					05/17/22 17:22	1
Dibromofluoromethane (Surr)	91		73 - 120					05/17/22 17:22	1

Client Sample Results

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

Job ID: 240-166341-1

Client Sample ID: MW-224S_050922

Lab Sample ID: 240-166341-4

Date Collected: 05/09/22 17:12

Matrix: Water

Date Received: 05/11/22 08:00

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			05/13/22 22:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 120		05/13/22 22:52	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			05/17/22 17:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/17/22 17:45	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 17:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/17/22 17:45	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 17:45	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/17/22 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		62 - 137		05/17/22 17:45	1
4-Bromofluorobenzene (Surr)	98		56 - 136		05/17/22 17:45	1
Toluene-d8 (Surr)	101		78 - 122		05/17/22 17:45	1
Dibromofluoromethane (Surr)	91		73 - 120		05/17/22 17:45	1

Surrogate Summary

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

Job ID: 240-166341-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL	DBFM
		(62-137)	(56-136)	(78-122)	(73-120)
240-166341-1	TRIP BLANK_71	99	101	102	91
240-166341-2	MW-201_050922	101	103	104	92
240-166341-2 MS	MW-201-MS_050922	96	107	103	91
240-166341-2 MSD	MW-201-MSD_050922	97	107	104	92
240-166341-3	MW-201S_050922	100	103	104	91
240-166341-4	MW-224S_050922	99	98	101	91
LCS 240-526755/5	Lab Control Sample	98	110	106	94
MB 240-526755/8	Method Blank	101	102	103	93

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)

Lab Sample ID	Client Sample ID	DCA
		(66-120)
240-166341-2	MW-201_050922	89
240-166341-2 MS	MW-201-MS_050922	89
240-166341-2 MSD	MW-201-MSD_050922	90
240-166341-3	MW-201S_050922	88
240-166341-4	MW-224S_050922	88
LCS 240-526434/3	Lab Control Sample	86
MB 240-526434/4	Method Blank	88

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-166341-1

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

Lab Sample ID: MB 240-526755/8
Matrix: Water
Analysis Batch: 526755

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			05/17/22 13:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			05/17/22 13:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 13:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			05/17/22 13:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			05/17/22 13:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			05/17/22 13:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		62 - 137		05/17/22 13:16	1
4-Bromofluorobenzene (Surr)	102		56 - 136		05/17/22 13:16	1
Toluene-d8 (Surr)	103		78 - 122		05/17/22 13:16	1
Dibromofluoromethane (Surr)	93		73 - 120		05/17/22 13:16	1

Lab Sample ID: LCS 240-526755/5
Matrix: Water
Analysis Batch: 526755

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1-Dichloroethene	20.0	21.1		ug/L		105	63 - 134
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	77 - 123
Tetrachloroethene	20.0	21.3		ug/L		106	76 - 123
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	75 - 124
Trichloroethene	20.0	19.6		ug/L		98	70 - 122
Vinyl chloride	20.0	17.5		ug/L		88	60 - 144

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		62 - 137
4-Bromofluorobenzene (Surr)	110		56 - 136
Toluene-d8 (Surr)	106		78 - 122
Dibromofluoromethane (Surr)	94		73 - 120

Lab Sample ID: 240-166341-2 MS
Matrix: Water
Analysis Batch: 526755

Client Sample ID: MW-201-MS_050922
Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	1.0	U	20.0	19.6		ug/L		98	56 - 135
cis-1,2-Dichloroethene	1.0	U	20.0	18.9		ug/L		94	66 - 128
Tetrachloroethene	1.0	U	20.0	20.3		ug/L		102	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	56 - 136
Trichloroethene	1.0	U	20.0	18.3		ug/L		92	61 - 124
Vinyl chloride	1.0	U	20.0	16.3		ug/L		81	43 - 157

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	96		62 - 137
4-Bromofluorobenzene (Surr)	107		56 - 136
Toluene-d8 (Surr)	103		78 - 122

QC Sample Results

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

Job ID: 240-166341-1

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

Lab Sample ID: 240-166341-2 MS
Matrix: Water
Analysis Batch: 526755

Client Sample ID: MW-201-MS_050922
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	91		73 - 120

Lab Sample ID: 240-166341-2 MSD
Matrix: Water
Analysis Batch: 526755

Client Sample ID: MW-201-MSD_050922
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	20.0	20.2		ug/L		101	56 - 135	3	26
cis-1,2-Dichloroethene	1.0	U	20.0	18.9		ug/L		95	66 - 128	0	14
Tetrachloroethene	1.0	U	20.0	20.9		ug/L		104	62 - 131	3	20
trans-1,2-Dichloroethene	1.0	U	20.0	19.6		ug/L		98	56 - 136	3	15
Trichloroethene	1.0	U	20.0	18.8		ug/L		94	61 - 124	3	15
Vinyl chloride	1.0	U	20.0	17.0		ug/L		85	43 - 157	4	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	107		56 - 136
Toluene-d8 (Surr)	104		78 - 122
Dibromofluoromethane (Surr)	92		73 - 120

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

Lab Sample ID: MB 240-526434/4
Matrix: Water
Analysis Batch: 526434

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			05/13/22 20:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		66 - 120		05/13/22 20:29	1

Lab Sample ID: LCS 240-526434/3
Matrix: Water
Analysis Batch: 526434

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	10.4		ug/L		104	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		66 - 120

Lab Sample ID: 240-166341-2 MS
Matrix: Water
Analysis Batch: 526434

Client Sample ID: MW-201-MS_050922
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	10.4		ug/L		104	51 - 153

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QC Sample Results

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

Job ID: 240-166341-1

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

<i>Surrogate</i>	<i>MS</i> <i>%Recovery</i>	<i>MS</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	89		66 - 120

Lab Sample ID: 240-166341-2 MSD
Matrix: Water
Analysis Batch: 526434

Client Sample ID: MW-201-MSD_050922
Prep Type: Total/NA

<i>Analyte</i>	<i>Sample</i> <i>Result</i>	<i>Sample</i> <i>Qualifier</i>	<i>Spike</i> <i>Added</i>	<i>MSD</i> <i>Result</i>	<i>MSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
1,4-Dioxane	2.0	U	10.0	11.1		ug/L		111	51 - 153	7	16

<i>Surrogate</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	90		66 - 120

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QC Association Summary

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

Job ID: 240-166341-1

GC/MS VOA

Analysis Batch: 526434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166341-2	MW-201_050922	Total/NA	Water	8260D SIM	
240-166341-3	MW-201S_050922	Total/NA	Water	8260D SIM	
240-166341-4	MW-224S_050922	Total/NA	Water	8260D SIM	
MB 240-526434/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-526434/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-166341-2 MS	MW-201-MS_050922	Total/NA	Water	8260D SIM	
240-166341-2 MSD	MW-201-MSD_050922	Total/NA	Water	8260D SIM	

Analysis Batch: 526755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-166341-1	TRIP BLANK_71	Total/NA	Water	8260D	
240-166341-2	MW-201_050922	Total/NA	Water	8260D	
240-166341-3	MW-201S_050922	Total/NA	Water	8260D	
240-166341-4	MW-224S_050922	Total/NA	Water	8260D	
MB 240-526755/8	Method Blank	Total/NA	Water	8260D	
LCS 240-526755/5	Lab Control Sample	Total/NA	Water	8260D	
240-166341-2 MS	MW-201-MS_050922	Total/NA	Water	8260D	
240-166341-2 MSD	MW-201-MSD_050922	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 240-166341-1

Client Sample ID: TRIP BLANK_71

Lab Sample ID: 240-166341-1

Date Collected: 05/09/22 00:00

Matrix: Water

Date Received: 05/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526755	05/17/22 15:31	TJL1	TAL CAN

Client Sample ID: MW-201_050922

Lab Sample ID: 240-166341-2

Date Collected: 05/09/22 13:50

Matrix: Water

Date Received: 05/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526755	05/17/22 15:53	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	526434	05/13/22 21:17	CS	TAL CAN

Client Sample ID: MW-201S_050922

Lab Sample ID: 240-166341-3

Date Collected: 05/09/22 15:15

Matrix: Water

Date Received: 05/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526755	05/17/22 17:22	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	526434	05/13/22 22:29	CS	TAL CAN

Client Sample ID: MW-224S_050922

Lab Sample ID: 240-166341-4

Date Collected: 05/09/22 17:12

Matrix: Water

Date Received: 05/11/22 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	526755	05/17/22 17:45	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	526434	05/13/22 22:52	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: 240-166341-1

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.



Chain of Custody Record

0.3/10.3

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

NPDES RCRA Other DW RCRA Other

Client Contact: Arcadis 190
 Address: 28550 Cabot Drive, Suite 500
 City/State/Zip: Novi, MI, 48377
 Phone: 248-994-2240
 Project Name: Ford LTP On-Site
 Project Number: 30080642.401.03
 PO #: 30080642.401.03

Regulatory program: DW NPDES RCRA Other

Client Project Manager: Kris Hinskey
 Telephone: 269-832-7478
 Email: Kristoffer.Hinskey@arcadis.com

Sampler Name: *Newton Glender*
 Method of Shipment/Carrier:

Shipping/Tracking No.:

Site Contact: Christina Weaver
 Telephone: 248-994-2329

Lab Contact: Mike DelMonico
 Telephone: 330-966-9783

Analysis Turnaround Time
 TAT if different from below:
 3 weeks
 2 weeks
 1 week
 2 days
 1 day

Analysis:
 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

Containers & Preservatives
 HCl NaOH ZnAc Other:

Filtered Sample (Y/N): NG

Composite (C/Grab): C

Matrix:
 Air Aqueous Solid Other:

Sample Date	Sample Time	Matrix	Containers & Preservatives	Filtered Sample (Y/N)	Composite (C/Grab)	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
TRIP BLANK_71	5/9/22 1350	X	HCl	N	C	X	X	X	X	X	X	X
MW-201-050922	1350		HCl	N	C	X	X	X	X	X	X	X
MW-201S-050922	1515		HCl	N	C	X	X	X	X	X	X	X
MW-224S-050922	1712		HCl	N	C	X	X	X	X	X	X	X
MW-201-MS-050922	1350		HCl	N	C	X	X	X	X	X	X	X
MW-201-MSD-050922	1350		HCl	N	C	X	X	X	X	X	X	X

Sample Specific Notes / Special Instructions:
 1 Trip Blank
 3 VOAs for 8260D
 3 VOAs for 8260D SIM
 MS/MSO
 MS/MSO
 MS/MSO

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

Chain of Custody:
 Received by: *Newton Glender* Date/Time: 5/9/22 1930
 Received by: *Christina Weaver* Date/Time: 5/10/22 1014
 Received in Laboratory by: *Christina Weaver* Date/Time: 5/10/22 1014

Company: Arcadis
 Date/Time: 5/9/22 1930

Company: ARCADIS
 Date/Time: 5/10/22 1014

Company: CETA
 Date/Time: 5/10/22 1014

Company: Arcadis
 Date/Time: 5/9/22 1930

Company: ARCADIS
 Date/Time: 5/10/22 1014

Company: CETA
 Date/Time: 5/10/22 1014

Company: Arcadis
 Date/Time: 5/9/22 1930

Company: ARCADIS
 Date/Time: 5/10/22 1014

Company: CETA
 Date/Time: 5/10/22 1014

Sample Identification	Sample Date	Sample Time	Matrix	Containers & Preservatives	Filtered Sample (Y/N)	Composite (C/Grab)	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
TRIP BLANK_71	5/9/22	1350	X	HCl	N	C	X	X	X	X	X	X	X
MW-201-050922		1350		HCl	N	C	X	X	X	X	X	X	X
MW-201S-050922		1515		HCl	N	C	X	X	X	X	X	X	X
MW-224S-050922		1712		HCl	N	C	X	X	X	X	X	X	X
MW-201-MS-050922		1350		HCl	N	C	X	X	X	X	X	X	X
MW-201-MSD-050922		1350		HCl	N	C	X	X	X	X	X	X	X

Possible Hazard Identification:
 Non-Hazard Flammable Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:
 Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
 Level IV Reporting requested.

Relinquished by: *Newton Glender* Date/Time: 5/9/22 1930
Relinquished by: *Christina Weaver* Date/Time: 5/10/22 1014
Relinquished by: *Christina Weaver* Date/Time: 5/10/22 1014

Company: Arcadis
 Date/Time: 5/9/22 1930

Company: ARCADIS
 Date/Time: 5/10/22 1014

Company: CETA
 Date/Time: 5/10/22 1014

Company: Arcadis
 Date/Time: 5/9/22 1930

Company: ARCADIS
 Date/Time: 5/10/22 1014

Company: CETA
 Date/Time: 5/10/22 1014



Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 166341
Canton Facility

Client ArCADIS Site Name Livingston LTP Cooler unpacked by: me
 Cooler Received on 5-11-22 Opened on 5-11-22

FedEx: 1st Grd Exp UPS FAS (Clipper) Client Drop Off TestAmerica Courier Other _____
 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. 0.3 °C Corrected Cooler Temp. 0.3 °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 NA
 -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)? Yes No
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
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC157842
 If yes, Questions 13-17 have been checked at the originating laboratory.
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 # Covered 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) _____ were 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: _____