

## ANALYTICAL REPORT

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

Laboratory Job ID: 240-167066-1  
Client Project/Site: Ford LTP - Off Site

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

Attn: Kristoffer Hinskey



---

Authorized for release by:  
6/6/2022 10:19:35 AM

Michael DeMonico, Project Manager I  
(330)497-9396  
[Michael.DeMonico@et.eurofinsus.com](mailto:Michael.DeMonico@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Method Summary . . . . .	5
Sample Summary . . . . .	6
Detection Summary . . . . .	7
Client Sample Results . . . . .	8
Surrogate Summary . . . . .	11
QC Sample Results . . . . .	12
QC Association Summary . . . . .	15
Lab Chronicle . . . . .	16
Certification Summary . . . . .	17
Chain of Custody . . . . .	18

# Definitions/Glossary

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

Job ID: 240-167066-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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 - Off Site

Job ID: 240-167066-1

---

**Job ID: 240-167066-1**

---

**Laboratory: Eurofins Canton**

---

**Narrative**

**Job Narrative  
240-167066-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 5/21/2022 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 0.9° C and 1.2° C.

**GC/MS VOA**

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

**VOA Prep**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Method Summary

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

Job ID: 240-167066-1

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Sample Summary

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

Job ID: 240-167066-1

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-167066-1	TRIP BLANK_158	Water	05/19/22 00:00	05/21/22 08:00
240-167066-2	MW-73SR_051922	Water	05/19/22 11:10	05/21/22 08:00
240-167066-3	MW-73D_051922	Water	05/19/22 09:50	05/21/22 08:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Detection Summary

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

Job ID: 240-167066-1

## Client Sample ID: TRIP BLANK\_158

Lab Sample ID: 240-167066-1

No Detections.

## Client Sample ID: MW-73SR\_051922

Lab Sample ID: 240-167066-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.1		1.0	0.46	ug/L	1		8260D	Total/NA

## Client Sample ID: MW-73D\_051922

Lab Sample ID: 240-167066-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Canton

# Client Sample Results

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

Job ID: 240-167066-1

**Client Sample ID: TRIP BLANK\_158**

**Lab Sample ID: 240-167066-1**

**Date Collected: 05/19/22 00:00**

**Matrix: Water**

**Date Received: 05/21/22 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			06/01/22 13:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/01/22 13:50	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 13:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/01/22 13:50	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 13:50	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/01/22 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		62 - 137		06/01/22 13:50	1
4-Bromofluorobenzene (Surr)	98		56 - 136		06/01/22 13:50	1
Toluene-d8 (Surr)	102		78 - 122		06/01/22 13:50	1
Dibromofluoromethane (Surr)	104		73 - 120		06/01/22 13:50	1



# Client Sample Results

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

Job ID: 240-167066-1

**Client Sample ID: MW-73SR\_051922**

**Lab Sample ID: 240-167066-2**

**Date Collected: 05/19/22 11:10**

**Matrix: Water**

**Date Received: 05/21/22 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			06/01/22 02:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		66 - 120		06/01/22 02:21	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			06/01/22 14:12	1
<b>cis-1,2-Dichloroethene</b>	<b>1.1</b>		1.0	0.46	ug/L			06/01/22 14:12	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 14:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/01/22 14:12	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 14:12	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/01/22 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		62 - 137		06/01/22 14:12	1
4-Bromofluorobenzene (Surr)	88		56 - 136		06/01/22 14:12	1
Toluene-d8 (Surr)	94		78 - 122		06/01/22 14:12	1
Dibromofluoromethane (Surr)	100		73 - 120		06/01/22 14:12	1

# Client Sample Results

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

Job ID: 240-167066-1

**Client Sample ID: MW-73D\_051922**

**Lab Sample ID: 240-167066-3**

Date Collected: 05/19/22 09:50

Matrix: Water

Date Received: 05/21/22 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.2		2.0	0.86	ug/L			06/01/22 02:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		66 - 120		06/01/22 02:45	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			06/01/22 14:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/01/22 14:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 14:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/01/22 14:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 14:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/01/22 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		62 - 137		06/01/22 14:34	1
4-Bromofluorobenzene (Surr)	89		56 - 136		06/01/22 14:34	1
Toluene-d8 (Surr)	94		78 - 122		06/01/22 14:34	1
Dibromofluoromethane (Surr)	106		73 - 120		06/01/22 14:34	1

# Surrogate Summary

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

Job ID: 240-167066-1

## 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)
240-167066-1	TRIP BLANK_158	114	98	102	104
240-167066-2	MW-73SR_051922	118	88	94	100
240-167066-3	MW-73D_051922	110	89	94	106
240-167067-K-2 MS	Matrix Spike	115	95	99	111
240-167067-N-2 MSD	Matrix Spike Duplicate	116	95	97	110
LCS 240-528681/5	Lab Control Sample	105	92	97	106
MB 240-528681/8	Method Blank	116	93	95	108

### 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)
240-167066-2	MW-73SR_051922	84
240-167066-3	MW-73D_051922	86
240-167067-G-2 MS	Matrix Spike	88
240-167067-M-2 MSD	Matrix Spike Duplicate	89
LCS 240-528626/3	Lab Control Sample	86
MB 240-528626/4	Method Blank	87

### Surrogate Legend

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

# QC Sample Results

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

Job ID: 240-167066-1

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

**Lab Sample ID: MB 240-528681/8**  
**Matrix: Water**  
**Analysis Batch: 528681**

**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			06/01/22 10:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			06/01/22 10:08	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 10:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			06/01/22 10:08	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			06/01/22 10:08	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			06/01/22 10:08	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	116		62 - 137		06/01/22 10:08	1
4-Bromofluorobenzene (Surr)	93		56 - 136		06/01/22 10:08	1
Toluene-d8 (Surr)	95		78 - 122		06/01/22 10:08	1
Dibromofluoromethane (Surr)	108		73 - 120		06/01/22 10:08	1

**Lab Sample ID: LCS 240-528681/5**  
**Matrix: Water**  
**Analysis Batch: 528681**

**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	21.2		ug/L		106	63 - 134
cis-1,2-Dichloroethene	20.0	20.7		ug/L		104	77 - 123
Tetrachloroethene	20.0	18.9		ug/L		95	76 - 123
trans-1,2-Dichloroethene	20.0	21.4		ug/L		107	75 - 124
Trichloroethene	20.0	19.5		ug/L		97	70 - 122
Vinyl chloride	20.0	19.6		ug/L		98	60 - 144

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		62 - 137
4-Bromofluorobenzene (Surr)	92		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	106		73 - 120

**Lab Sample ID: 240-167067-K-2 MS**  
**Matrix: Water**  
**Analysis Batch: 528681**

**Client Sample ID: Matrix Spike**  
**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	16.2		ug/L		81	56 - 135
cis-1,2-Dichloroethene	1.0	U	20.0	18.1		ug/L		90	66 - 128
Tetrachloroethene	1.0	U F1	20.0	11.9	F1	ug/L		60	62 - 131
trans-1,2-Dichloroethene	1.0	U	20.0	17.2		ug/L		86	56 - 136
Trichloroethene	1.0	U	20.0	14.6		ug/L		73	61 - 124
Vinyl chloride	1.0	U	20.0	16.7		ug/L		83	43 - 157

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	115		62 - 137
4-Bromofluorobenzene (Surr)	95		56 - 136
Toluene-d8 (Surr)	99		78 - 122

Eurofins Canton

# QC Sample Results

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

Job ID: 240-167066-1

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

**Lab Sample ID: 240-167067-K-2 MS**  
**Matrix: Water**  
**Analysis Batch: 528681**

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	111		73 - 120

**Lab Sample ID: 240-167067-N-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 528681**

**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	20.0	16.4		ug/L		82	56 - 135	1	26
cis-1,2-Dichloroethene	1.0	U	20.0	18.3		ug/L		92	66 - 128	2	14
Tetrachloroethene	1.0	U F1	20.0	13.4		ug/L		67	62 - 131	12	20
trans-1,2-Dichloroethene	1.0	U	20.0	17.1		ug/L		86	56 - 136	1	15
Trichloroethene	1.0	U	20.0	14.8		ug/L		74	61 - 124	1	15
Vinyl chloride	1.0	U	20.0	16.6		ug/L		83	43 - 157	1	24

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	116		62 - 137
4-Bromofluorobenzene (Surr)	95		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	110		73 - 120

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

**Lab Sample ID: MB 240-528626/4**  
**Matrix: Water**  
**Analysis Batch: 528626**

**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			05/31/22 20:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		66 - 120		05/31/22 20:47	1

**Lab Sample ID: LCS 240-528626/3**  
**Matrix: Water**  
**Analysis Batch: 528626**

**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	11.7		ug/L		117	80 - 122

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

**Lab Sample ID: 240-167067-G-2 MS**  
**Matrix: Water**  
**Analysis Batch: 528626**

**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	10.9		ug/L		109	51 - 153

Eurofins Canton

# QC Sample Results

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

Job ID: 240-167066-1

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

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	88		66 - 120

**Lab Sample ID: 240-167067-M-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 528626**

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,4-Dioxane	2.0	U	10.0	11.9		ug/L		119	51 - 153	9	16

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# QC Association Summary

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

Job ID: 240-167066-1

## GC/MS VOA

### Analysis Batch: 528626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167066-2	MW-73SR_051922	Total/NA	Water	8260D SIM	
240-167066-3	MW-73D_051922	Total/NA	Water	8260D SIM	
MB 240-528626/4	Method Blank	Total/NA	Water	8260D SIM	
LCS 240-528626/3	Lab Control Sample	Total/NA	Water	8260D SIM	
240-167067-G-2 MS	Matrix Spike	Total/NA	Water	8260D SIM	
240-167067-M-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D SIM	

### Analysis Batch: 528681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-167066-1	TRIP BLANK_158	Total/NA	Water	8260D	
240-167066-2	MW-73SR_051922	Total/NA	Water	8260D	
240-167066-3	MW-73D_051922	Total/NA	Water	8260D	
MB 240-528681/8	Method Blank	Total/NA	Water	8260D	
LCS 240-528681/5	Lab Control Sample	Total/NA	Water	8260D	
240-167067-K-2 MS	Matrix Spike	Total/NA	Water	8260D	
240-167067-N-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260D	

# Lab Chronicle

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

Job ID: 240-167066-1

**Client Sample ID: TRIP BLANK\_158**

**Lab Sample ID: 240-167066-1**

**Date Collected: 05/19/22 00:00**

**Matrix: Water**

**Date Received: 05/21/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528681	06/01/22 13:50	TJL1	TAL CAN

**Client Sample ID: MW-73SR\_051922**

**Lab Sample ID: 240-167066-2**

**Date Collected: 05/19/22 11:10**

**Matrix: Water**

**Date Received: 05/21/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528681	06/01/22 14:12	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	528626	06/01/22 02:21	CS	TAL CAN

**Client Sample ID: MW-73D\_051922**

**Lab Sample ID: 240-167066-3**

**Date Collected: 05/19/22 09:50**

**Matrix: Water**

**Date Received: 05/21/22 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	528681	06/01/22 14:34	TJL1	TAL CAN
Total/NA	Analysis	8260D SIM		1	528626	06/01/22 02:45	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 - Off Site

Job ID: 240-167066-1

## 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.

Eurofins Canton

Chain of Custody Record

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

<b>Client Contact</b> Company Name: Arcadis Address: 28559 Cabot Drive, Suite 500 City/State/Zip: Nov4, MI, 48377 Phone: 248-994-2240		<b>Regulatory program:</b> DW NPDES RCRA Other	
<b>Client Project Manager:</b> Kris Hinesky Telephone: 269-832-7478 Email: Kriesoffer.Hinesky@arcadis.com		<b>Lab Contact:</b> Mike DellMocio Telephone: 330-966-9783	
<b>Site Contact:</b> Christina Weaver Telephone: 248-994-2329		TestAmerica Laboratories, Inc. COC No: 1 of 1 COC	
<b>Sampler Name:</b> Sean Turner / Sierra Sidel Method of Shipment/Carrier: Shipping/Tracking No:		For lab use only Walk-in client Lab sampling Job/SDG No:	
Project Name: Ford LTP ONE-Site Project Number: 3008642.402.04 PO # 3088642.402.04		Sample Specific Notes / Special Instructions:	
<b>Analysis Turnaround Time</b> TAT if different from below: 10 day 3 weeks 2 weeks 1 week 2 days 1 day		Sample Identification:	
<b>Containers &amp; Preservatives</b> H2SO4 HNO3 HCl NaOH NaCl Other:		Matrix: Solid Sediment Air Other:	
Filtered Sample (Y/N) Composite (C/Grab)		Analyses: 1,1-DCE 8280D cis-1,2-DCE 8280D Trans-1,2-DCE 8280D PCE 8260D TCE 8260D Vinyl Chloride 8260D 1,4-Dioxane 8260D SIM	
Sample Date: Sample Time:		Sample Specific Notes / Special Instructions:	
TRIP BLANK_158 MW-73SR_051922 MW-73D-051922		1 Trip Blank 3 VOAs for 8260D 3 VOAs for 8260D SIM	
Sample Date: Sample Time:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return to Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For _____ Months	
Possible Hazard Identification Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/>		240-167066 Chain of Custody	
<b>Special Instructions/OC Requirements &amp; Comments:</b> Submit all results through Cadena at jtomalla@cadenaco.com, Cadena #E202631 Level IV Reporting requested.		Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]	
Company: Arcadis Date/Time: 5/19/22 1320 Company: ARCADIS Date/Time: 5/20/22 1000 Company: [Signature] Date/Time: 5/21/22 0800		Received by: Novi Gold Storage Date/Time: 5/19/22 1320 Company: ARCADIS Date/Time: 5/20/22 1000 Received in Laboratory by: [Signature] Date/Time: 5-21-22 0800 Company: EETNL	



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14


Eurofins - Canton Sample Receipt Form/Narrative Barberton Facility Login #: 167066

Client Arcadis Site Name Ford LTP Cooler unpacked by: ome  
Cooler Received on 5-21-22 Opened on 5-23-22

FedEx: 1<sup>st</sup> Grd Exp UPS FAS (Clipper) Client Drop Off Eurofins Courier Other \_\_\_\_\_

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

Eurofins 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

- 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
  - Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 ea 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
  - Shippers' packing slip attached to the cooler(s)? Yes No
  - Did custody papers accompany the sample(s)? Yes No
  - Were the custody papers relinquished & signed in the appropriate place? Yes No
  - Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
  - Did all bottles arrive in good condition (Unbroken)? Yes No
  - Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
  - For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
  - Were correct bottle(s) used for the test(s) indicated? Yes No
  - Sufficient quantity received to perform indicated analyses? Yes No
  - 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC157842
  - Were VOAs on the COC? Yes No
  - Were air bubbles >6 mm in any VOA vials?  ← Larger than this. Yes No NA
  - Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered Yes No
  - 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: \_\_\_\_\_

Login #: 167066

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

**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	1.2	1.2	Wet Ice	Blue Ice	Dry Ice
								Water	None	
TA	Client	Box	Other	IR-13	IR-15	0.9	0.9	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