

## ANALYTICAL REPORT

Eurofins TestAmerica, Canton  
4101 Shuffel Street NW  
North Canton, OH 44720  
Tel: (330)497-9396

Laboratory Job ID: 240-145376-1  
Client Project/Site: Ford LTP - On Site

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

Attn: Kristoffer Hinskey



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Authorized for release by:  
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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: 240-145376-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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: 240-145376-1

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## Job ID: 240-145376-1

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### Laboratory: Eurofins TestAmerica, Canton

#### Narrative

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#### Job Narrative 240-145376-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/4/2021 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 0.6° C.

#### GC/MS VOA

Method 8260B: The internal standard areas fell outside of the acceptable QC range but are reported due to insufficient sample. Some have a 10X analysis requested: TRIP BLANK (240-145376-1).

Method 8260B: Surrogate recovery for the following sample was outside of acceptance limits: TRIP BLANK (240-145376-1). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

Method 8260B: No MS/MSD in batch 476005 due to an instrument issue: TRIP BLANK (240-145376-1).

Method 8260B: The matrix spike/matrix spike duplicate (MS/MSD) for samples TW-16-01\_030221 (240-145376-2) and TW-16-02\_030221 (240-145376-3) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

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: 240-145376-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8260B SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
5030B	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 TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396



# Sample Summary

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

Job ID: 240-145376-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-145376-1	TRIP BLANK	Water	03/02/21 00:00	03/04/21 08:00	
240-145376-2	TW-16-01_030221	Water	03/02/21 12:49	03/04/21 08:00	
240-145376-3	TW-16-02_030221	Water	03/02/21 14:28	03/04/21 08:00	

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- 10
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- 13
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# Detection Summary

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

Job ID: 240-145376-1

## Client Sample ID: TRIP BLANK

Lab Sample ID: 240-145376-1

No Detections.

## Client Sample ID: TW-16-01\_030221

Lab Sample ID: 240-145376-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	30		13	2.1	ug/L	13.33		8260B	Total/NA
Vinyl chloride	120		13	2.7	ug/L	13.33		8260B	Total/NA

## Client Sample ID: TW-16-02\_030221

Lab Sample ID: 240-145376-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	600		330	53	ug/L	333.33		8260B	Total/NA
Vinyl chloride	4100		330	67	ug/L	333.33		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

# Client Sample Results

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

Job ID: 240-145376-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-145376-1**

**Date Collected: 03/02/21 00:00**

**Matrix: Water**

**Date Received: 03/04/21 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/09/21 13:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/09/21 13:16	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/09/21 13:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/09/21 13:16	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/09/21 13:16	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/09/21 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		75 - 130		03/09/21 13:16	1
4-Bromofluorobenzene (Surr)	68		47 - 134		03/09/21 13:16	1
Toluene-d8 (Surr)	83		69 - 122		03/09/21 13:16	1
Dibromofluoromethane (Surr)	132	S1+	78 - 129		03/09/21 13:16	1



# Client Sample Results

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

Job ID: 240-145376-1

**Client Sample ID: TW-16-01\_030221**

**Lab Sample ID: 240-145376-2**

Date Collected: 03/02/21 12:49

Matrix: Water

Date Received: 03/04/21 08:00

**Method: 8260B 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			03/09/21 13:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	82		70 - 133					03/09/21 13:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	13	U	13	2.5	ug/L			03/10/21 16:49	13.33
<b>cis-1,2-Dichloroethene</b>	<b>30</b>		13	2.1	ug/L			03/10/21 16:49	13.33
Tetrachloroethene	13	U	13	2.0	ug/L			03/10/21 16:49	13.33
trans-1,2-Dichloroethene	13	U	13	2.5	ug/L			03/10/21 16:49	13.33
Trichloroethene	13	U	13	1.3	ug/L			03/10/21 16:49	13.33
<b>Vinyl chloride</b>	<b>120</b>		13	2.7	ug/L			03/10/21 16:49	13.33
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	82		75 - 130					03/10/21 16:49	13.33
4-Bromofluorobenzene (Surr)	98		47 - 134					03/10/21 16:49	13.33
Toluene-d8 (Surr)	97		69 - 122					03/10/21 16:49	13.33
Dibromofluoromethane (Surr)	87		78 - 129					03/10/21 16:49	13.33

# Client Sample Results

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

Job ID: 240-145376-1

**Client Sample ID: TW-16-02\_030221**

**Lab Sample ID: 240-145376-3**

Date Collected: 03/02/21 14:28

Matrix: Water

Date Received: 03/04/21 08:00

**Method: 8260B 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			03/09/21 14:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	84		70 - 133					03/09/21 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	330	U	330	63	ug/L			03/10/21 17:14	333.33
<b>cis-1,2-Dichloroethene</b>	<b>600</b>		330	53	ug/L			03/10/21 17:14	333.33
Tetrachloroethene	330	U	330	50	ug/L			03/10/21 17:14	333.33
trans-1,2-Dichloroethene	330	U	330	63	ug/L			03/10/21 17:14	333.33
Trichloroethene	330	U	330	33	ug/L			03/10/21 17:14	333.33
<b>Vinyl chloride</b>	<b>4100</b>		330	67	ug/L			03/10/21 17:14	333.33
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	82		75 - 130					03/10/21 17:14	333.33
4-Bromofluorobenzene (Surr)	96		47 - 134					03/10/21 17:14	333.33
Toluene-d8 (Surr)	96		69 - 122					03/10/21 17:14	333.33
Dibromofluoromethane (Surr)	86		78 - 129					03/10/21 17:14	333.33

# Surrogate Summary

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

Job ID: 240-145376-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-145376-1	TRIP BLANK	118	68	83	132 S1+
240-145376-2	TW-16-01_030221	82	98	97	87
240-145376-3	TW-16-02_030221	82	96	96	86
LCS 240-476005/4	Lab Control Sample	89	92	92	107
LCS 240-476245/4	Lab Control Sample	82	99	98	85
MB 240-476005/7	Method Blank	112	70	83	122
MB 240-476245/7	Method Blank	84	93	97	85

#### Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA (70-133)
240-145376-2	TW-16-01_030221	82
240-145376-3	TW-16-02_030221	84
500-195631-C-27 MS	Matrix Spike	89
500-195631-C-27 MSD	Matrix Spike Duplicate	79
LCS 240-476007/4	Lab Control Sample	82
MB 240-476007/5	Method Blank	87

#### Surrogate Legend

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

# QC Sample Results

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

Job ID: 240-145376-1

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

**Lab Sample ID: MB 240-476005/7**  
**Matrix: Water**  
**Analysis Batch: 476005**

**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	0.19	ug/L			03/09/21 11:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/09/21 11:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/09/21 11:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/09/21 11:26	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/09/21 11:26	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/09/21 11:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 130		03/09/21 11:26	1
4-Bromofluorobenzene (Surr)	70		47 - 134		03/09/21 11:26	1
Toluene-d8 (Surr)	83		69 - 122		03/09/21 11:26	1
Dibromofluoromethane (Surr)	122		78 - 129		03/09/21 11:26	1

**Lab Sample ID: LCS 240-476005/4**  
**Matrix: Water**  
**Analysis Batch: 476005**

**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	10.0	10.1		ug/L		101	73 - 129
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	75 - 124
Tetrachloroethene	10.0	9.86		ug/L		99	70 - 125
trans-1,2-Dichloroethene	10.0	10.5		ug/L		105	74 - 130
Trichloroethene	10.0	9.89		ug/L		99	71 - 121
Vinyl chloride	10.0	8.99		ug/L		90	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		75 - 130
4-Bromofluorobenzene (Surr)	92		47 - 134
Toluene-d8 (Surr)	92		69 - 122
Dibromofluoromethane (Surr)	107		78 - 129

**Lab Sample ID: MB 240-476245/7**  
**Matrix: Water**  
**Analysis Batch: 476245**

**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	0.19	ug/L			03/10/21 14:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/10/21 14:43	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/10/21 14:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/10/21 14:43	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/10/21 14:43	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/10/21 14:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		75 - 130		03/10/21 14:43	1
4-Bromofluorobenzene (Surr)	93		47 - 134		03/10/21 14:43	1
Toluene-d8 (Surr)	97		69 - 122		03/10/21 14:43	1

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# QC Sample Results

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

Job ID: 240-145376-1

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

Lab Sample ID: MB 240-476245/7  
Matrix: Water  
Analysis Batch: 476245

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	85		78 - 129		03/10/21 14:43	1

Lab Sample ID: LCS 240-476245/4  
Matrix: Water  
Analysis Batch: 476245

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	10.0	8.30		ug/L		83	73 - 129
cis-1,2-Dichloroethene	10.0	8.71		ug/L		87	75 - 124
Tetrachloroethene	10.0	9.84		ug/L		98	70 - 125
trans-1,2-Dichloroethene	10.0	8.78		ug/L		88	74 - 130
Trichloroethene	10.0	8.58		ug/L		86	71 - 121
Vinyl chloride	10.0	9.43		ug/L		94	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		75 - 130
4-Bromofluorobenzene (Surr)	99		47 - 134
Toluene-d8 (Surr)	98		69 - 122
Dibromofluoromethane (Surr)	85		78 - 129

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

Lab Sample ID: MB 240-476007/5  
Matrix: Water  
Analysis Batch: 476007

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			03/09/21 11:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 133		03/09/21 11:03	1

Lab Sample ID: LCS 240-476007/4  
Matrix: Water  
Analysis Batch: 476007

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	10.1		ug/L		101	80 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		70 - 133

Lab Sample ID: 500-195631-C-27 MS  
Matrix: Water  
Analysis Batch: 476007

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	1.5	J	10.0	11.6		ug/L		101	46 - 170

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# QC Sample Results

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

Job ID: 240-145376-1

## Method: 8260B 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		70 - 133

**Lab Sample ID: 500-195631-C-27 MSD**  
**Matrix: Water**  
**Analysis Batch: 476007**

**Client Sample ID: Matrix Spike Duplicate**  
**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	1.5	J	10.0	11.2		ug/L		97	46 - 170	3	26

<i>Surrogate</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	79		70 - 133

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# QC Association Summary

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

Job ID: 240-145376-1

## GC/MS VOA

### Analysis Batch: 476005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-145376-1	TRIP BLANK	Total/NA	Water	8260B	
MB 240-476005/7	Method Blank	Total/NA	Water	8260B	
LCS 240-476005/4	Lab Control Sample	Total/NA	Water	8260B	

### Analysis Batch: 476007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-145376-2	TW-16-01_030221	Total/NA	Water	8260B SIM	
240-145376-3	TW-16-02_030221	Total/NA	Water	8260B SIM	
MB 240-476007/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-476007/4	Lab Control Sample	Total/NA	Water	8260B SIM	
500-195631-C-27 MS	Matrix Spike	Total/NA	Water	8260B SIM	
500-195631-C-27 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

### Analysis Batch: 476245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-145376-2	TW-16-01_030221	Total/NA	Water	8260B	
240-145376-3	TW-16-02_030221	Total/NA	Water	8260B	
MB 240-476245/7	Method Blank	Total/NA	Water	8260B	
LCS 240-476245/4	Lab Control Sample	Total/NA	Water	8260B	

# Lab Chronicle

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

Job ID: 240-145376-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-145376-1**

**Date Collected: 03/02/21 00:00**

**Matrix: Water**

**Date Received: 03/04/21 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476005	03/09/21 13:16	LEE	TAL CAN

**Client Sample ID: TW-16-01\_030221**

**Lab Sample ID: 240-145376-2**

**Date Collected: 03/02/21 12:49**

**Matrix: Water**

**Date Received: 03/04/21 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		13.33	476245	03/10/21 16:49	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	476007	03/09/21 13:56	SAM	TAL CAN

**Client Sample ID: TW-16-02\_030221**

**Lab Sample ID: 240-145376-3**

**Date Collected: 03/02/21 14:28**

**Matrix: Water**

**Date Received: 03/04/21 08:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		333.33	476245	03/10/21 17:14	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	476007	03/09/21 14:21	SAM	TAL CAN

## Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396



# Accreditation/Certification Summary

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

Job ID: 240-145376-1

## Laboratory: Eurofins TestAmerica, 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	02-23-21 *
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21 *
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21 *
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-21
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

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



0.5/06

# Chain of Custody Record

## MICHIGAN 190

### TestAmerica

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

Regulatory program:  DW  NPDES  RCRA  Other

Client Project Manager: Kris Hinskey  
 Telephone: 248-994-2240  
 Email: kristoffer.hinskey@arcadis.com

Site Contact: Julia McClafferty  
 Telephone: 734-644-5131

Lab Contact: Mike DelMonico  
 Telephone: 330-497-9396

Company Name: Arcadis  
 Address: 28550 Cabot Drive, Suite 500  
 City/State/Zip: Novi, MI, 48377  
 Phone: 248-994-2240

Project Name: Ford LTP On-Site  
 Project Number: 30050315-401.03  
 PO # 30050315-401.03

Sampler Name: *Kari Dohme*  
 Method of Shipment/Carrier:  
 Shipping/Tracking No:

Sample Date	Sample Time	Matrix						Other:
		Aqueous	Sediment	Solid	Other:	Unpres	Other:	
---	---	X						
3/2/21	1249	G						
3/2/21	1428	G						

Sample Identification	Filtered Sample (Y/N)	Composite=C / Grab=G	Analyses						Sample Specific Notes / Special Instructions:
			1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B	
TRIP BLANK	NG	G	X	X	X	X	X	X	1 Trip Blank
TW-16-01-030221	NG	G	X	X	X	X	X	X	3 Vials for 8260B 3 Vials for 8260B SIM
TW-16-02-030221	NG	G	X	X	X	X	X	X	I



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:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>Kari Dohme</i>	Arcadis	3/2/21 19:10	Nori Cold Storage	Arcadis	3/2/21 17:12
RACHEL BLANK Janel Fisher	Arcadis	3/13/21 09:58	<i>Wanda Barthell</i>	ETA	3/31/21 9:59
			MJS Laboratory	ETA CANTON	MAR 04 2021

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**Eurofins TestAmerica Canton Sample Receipt Form/Narrative**  
**Canton Facility**

Login # : 240-145376

Client Arcadis Site Name \_\_\_\_\_ Cooler unpacked by: **MJS** **ETA CANTON**  
 Cooler Received on MAR 04 2021 Opened on MAR 04 2021  
 FedEx: 1<sup>st</sup> Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other \_\_\_\_\_

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

TestAmerica Cooler # 77 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-11 (CF +0.1 °C) Observed Cooler Temp. 0.5 °C Corrected Cooler Temp. 0.6 °C  
 IR GUN #IR-12 (CF +0.2°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# HC907861
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 # NA 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: **MJS** **ETA CANTON**

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: \_\_\_\_\_