

ANALYTICAL REPORT

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

Laboratory Job ID: 240-130852-1
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:
6/10/2020 9:43:04 AM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

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	14
Lab Chronicle	15
Certification Summary	16
Chain of Custody	17

Definitions/Glossary

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

Job ID: 240-130852-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

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

Job ID: 240-130852-1

Job ID: 240-130852-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP Off-Site

Report Number: 240-130852-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 5/27/2020 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-130852-1), MW-102_052220 (240-130852-2) and MW-102S_052220 (240-130852-3) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/02/2020.

The matrix spike/matrix spike duplicate (MS/MSD) for samples TRIP BLANK (240-130852-1), MW-102_052220 (240-130852-2) and MW-102S_052220 (240-130852-3) was not reported, because the analyte list for these samples did not match the analyte list for the MS/MSD parent sample.

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

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MW-102_052220 (240-130852-2) and MW-102S_052220 (240-130852-3) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 06/04/2020.

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

Method Summary

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

Job ID: 240-130852-1

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 Off-Site

Job ID: 240-130852-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-130852-1	TRIP BLANK	Water	05/22/20 00:00	05/27/20 09:10	
240-130852-2	MW-102_052220	Water	05/22/20 10:51	05/27/20 09:10	
240-130852-3	MW-102S_052220	Water	05/22/20 09:47	05/27/20 09:10	

- 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: 240-130852-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-130852-1

No Detections.

Client Sample ID: MW-102_052220

Lab Sample ID: 240-130852-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.4	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA
Vinyl chloride	1.5		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MW-102S_052220

Lab Sample ID: 240-130852-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

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

Job ID: 240-130852-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-130852-1

Date Collected: 05/22/20 00:00

Matrix: Water

Date Received: 05/27/20 09:10

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			06/02/20 22:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/02/20 22:12	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/02/20 22:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/02/20 22:12	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/02/20 22:12	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/02/20 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		75 - 130		06/02/20 22:12	1
4-Bromofluorobenzene (Surr)	99		47 - 134		06/02/20 22:12	1
Toluene-d8 (Surr)	90		69 - 122		06/02/20 22:12	1
Dibromofluoromethane (Surr)	99		78 - 129		06/02/20 22:12	1

Client Sample Results

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

Job ID: 240-130852-1

Client Sample ID: MW-102_052220

Lab Sample ID: 240-130852-2

Date Collected: 05/22/20 10:51

Matrix: Water

Date Received: 05/27/20 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.4	J	2.0	0.86	ug/L			06/04/20 15:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 133		06/04/20 15:18	1

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			06/02/20 18:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/02/20 18:00	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/02/20 18:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/02/20 18:00	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/02/20 18:00	1
Vinyl chloride	1.5		1.0	0.20	ug/L			06/02/20 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		75 - 130		06/02/20 18:00	1
4-Bromofluorobenzene (Surr)	104		47 - 134		06/02/20 18:00	1
Toluene-d8 (Surr)	99		69 - 122		06/02/20 18:00	1
Dibromofluoromethane (Surr)	97		78 - 129		06/02/20 18:00	1

Client Sample Results

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

Job ID: 240-130852-1

Client Sample ID: MW-102S_052220

Lab Sample ID: 240-130852-3

Date Collected: 05/22/20 09:47

Matrix: Water

Date Received: 05/27/20 09:10

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			06/04/20 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 133		06/04/20 15:44	1

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			06/02/20 18:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/02/20 18:26	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/02/20 18:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/02/20 18:26	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/02/20 18:26	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/02/20 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		75 - 130		06/02/20 18:26	1
4-Bromofluorobenzene (Surr)	101		47 - 134		06/02/20 18:26	1
Toluene-d8 (Surr)	95		69 - 122		06/02/20 18:26	1
Dibromofluoromethane (Surr)	97		78 - 129		06/02/20 18:26	1

Surrogate Summary

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

Job ID: 240-130852-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-130852-1	TRIP BLANK	101	99	90	99
240-130852-2	MW-102_052220	90	104	99	97
240-130852-3	MW-102S_052220	95	101	95	97
LCS 240-436533/4	Lab Control Sample	100	109	95	96
MB 240-436533/7	Method Blank	94	104	94	95

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)
240-130852-2	MW-102_052220	93
240-130852-3	MW-102S_052220	94
240-130852-3 MS	MW-102S_052220	87
240-130852-3 MSD	MW-102S_052220	93
LCS 240-436818/4	Lab Control Sample	91
MB 240-436818/5	Method Blank	90

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-130852-1

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

Lab Sample ID: MB 240-436533/7
Matrix: Water
Analysis Batch: 436533

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			06/02/20 15:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			06/02/20 15:03	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			06/02/20 15:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/02/20 15:03	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			06/02/20 15:03	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			06/02/20 15:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		75 - 130		06/02/20 15:03	1
4-Bromofluorobenzene (Surr)	104		47 - 134		06/02/20 15:03	1
Toluene-d8 (Surr)	94		69 - 122		06/02/20 15:03	1
Dibromofluoromethane (Surr)	95		78 - 129		06/02/20 15:03	1

Lab Sample ID: LCS 240-436533/4
Matrix: Water
Analysis Batch: 436533

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	10.1		ug/L		101	75 - 124
Tetrachloroethene	10.0	11.1		ug/L		111	70 - 125
trans-1,2-Dichloroethene	10.0	9.72		ug/L		97	74 - 130
Trichloroethene	10.0	9.98		ug/L		100	71 - 121
Vinyl chloride	10.0	12.8		ug/L		128	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		75 - 130
4-Bromofluorobenzene (Surr)	109		47 - 134
Toluene-d8 (Surr)	95		69 - 122
Dibromofluoromethane (Surr)	96		78 - 129

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

Lab Sample ID: MB 240-436818/5
Matrix: Water
Analysis Batch: 436818

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			06/04/20 06:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 133		06/04/20 06:43	1

QC Sample Results

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

Job ID: 240-130852-1

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

Lab Sample ID: LCS 240-436818/4
Matrix: Water
Analysis Batch: 436818

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	9.26		ug/L		93	80 - 135
Surrogate							
	%Recovery	LCS Qualifier	LCS Limits				
1,2-Dichloroethane-d4 (Surr)	91		70 - 133				

Lab Sample ID: 240-130852-3 MS
Matrix: Water
Analysis Batch: 436818

Client Sample ID: MW-102S_052220
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	9.13		ug/L		91	46 - 170
Surrogate									
	%Recovery	MS Qualifier	MS Limits						
1,2-Dichloroethane-d4 (Surr)	87		70 - 133						

Lab Sample ID: 240-130852-3 MSD
Matrix: Water
Analysis Batch: 436818

Client Sample ID: MW-102S_052220
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	9.23		ug/L		92	46 - 170	1	26
Surrogate											
	%Recovery	MSD Qualifier	MSD Limits								
1,2-Dichloroethane-d4 (Surr)	93		70 - 133								

QC Association Summary

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

Job ID: 240-130852-1

GC/MS VOA

Analysis Batch: 436533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-130852-1	TRIP BLANK	Total/NA	Water	8260B	
240-130852-2	MW-102_052220	Total/NA	Water	8260B	
240-130852-3	MW-102S_052220	Total/NA	Water	8260B	
MB 240-436533/7	Method Blank	Total/NA	Water	8260B	
LCS 240-436533/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 436818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-130852-2	MW-102_052220	Total/NA	Water	8260B SIM	
240-130852-3	MW-102S_052220	Total/NA	Water	8260B SIM	
MB 240-436818/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-436818/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-130852-3 MS	MW-102S_052220	Total/NA	Water	8260B SIM	
240-130852-3 MSD	MW-102S_052220	Total/NA	Water	8260B SIM	

Lab Chronicle

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

Job ID: 240-130852-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-130852-1

Date Collected: 05/22/20 00:00

Matrix: Water

Date Received: 05/27/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	436533	06/02/20 22:12	LRW	TAL CAN

Client Sample ID: MW-102_052220

Lab Sample ID: 240-130852-2

Date Collected: 05/22/20 10:51

Matrix: Water

Date Received: 05/27/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	436533	06/02/20 18:00	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	436818	06/04/20 15:18	TJL2	TAL CAN

Client Sample ID: MW-102S_052220

Lab Sample ID: 240-130852-3

Date Collected: 05/22/20 09:47

Matrix: Water

Date Received: 05/27/20 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	436533	06/02/20 18:26	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	436818	06/04/20 15:44	TJL2	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 Off-Site

Job ID: 240-130852-1

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	06-30-20
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-21
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Chain of Custody Record

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

Regulatory program: DW NPDES RCRA Other

Client Contact
Company Name: Arcadis
Address: 2850 Cabot Drive, Suite 500
City/State/Zip: Novi, MI, 48377
Phone: 248-994-2240
Project Name: Ford LTP Off-Site
Project Number: 30050315.402.04
PO # 30050315.402.04

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

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

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

Sampler Name: XENIA CHAN
Method of Shipment/Carrier:
Shipping/Tracking No:

Sample Identification	Sample Date	Sample Time	Matrix				Containers & Preservatives				Filtered Sample (Y/N)	Composite C / Grab G	Analyses						Sample Specific Notes / Special Instructions			
			Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl			NaOH	ZnO	LiPres	Other:	1,1-DCE 8260B	cis-1,2-DCE 8260B		Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B
TRIP BLANK	---	---																				1 TRIP BLANK
MW-102-052220	5/22/20	1051																				3 VOAS for 8260B 3 VOAS for 8260B SIM
MW-102S-052220	5/22/20	947																				3 VOAS for 8260B 3 VOAS for 8260B SIM



Possible Hazard Identification
 Non-Hazard
 Irritable
 Inflammable
 Corrosive
 Toxic
 Volatile
 Other

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203631
Level IV Reporting requested.

Relinquished by: [Signature]
 Relinquished by: RACHEL BIECALK Paul Patalan
 Relinquished by: [Signature]

Company: ARCADIS
 Date/Time: 5/22/20 1140
 Received by: RACHEL BIECALK Paul Patalan

Company: ARCADIS
 Date/Time: 5/22/20 1243
 Received by: NUNU OLD STORAGE

Company: ARCADIS
 Date/Time: 5/26/20 1220
 Received in Laboratory by: Jennifer

Company: ARCADIS
 Date/Time: 5/22/20 1140
 Received by: ARCADIS

Company: ARCADIS
 Date/Time: 5/22/20 1243
 Received by: ARCADIS

Company: ETA
 Date/Time: 5/26/20 1221
 Received by: ETA

Signature: Adam Ganot
 Date: 5/27/20 910



Eurofins TestAmerica Canton Sample Receipt Form/Narrative		Login # : <u>130852</u>
Canton Facility		
Client <u>Arcadis Ford LTP</u>	Site Name _____	Cooler unpacked by: <u>Adrian Gandy</u>
Cooler Received on <u>5-27-20</u>	Opened on <u>5-27-20</u>	
FedEx: 1 st <input checked="" type="radio"/> Grd Exp	UPS FAS Clipper	Client Drop Off TestAmerica Courier Other
Receipt After-hours: Drop-off Date/Time		Storage Location
TestAmerica Cooler # <u>TA</u>	Foam Box	Client Cooler Box Other _____
Packing material used: <u>Bubble Wrap</u>	Foam Plastic Bag	None Other _____
COOLANT: <u>Water Ice</u>	Blue Ice	Dry Ice Water None
1. Cooler temperature upon receipt		<input type="checkbox"/> See Multiple Cooler Form
IR GUN# IR-10 (CF +0.7°C)	Observed Cooler Temp. <u>3.4</u> °C	Corrected Cooler Temp. <u>4.1</u> °C
IR GUN #IR-11 (CF +0.9°C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity <u>1</u>		<input checked="" type="radio"/> Yes No
-Were the seals on the outside of the cooler(s) signed & dated?		<input checked="" type="radio"/> Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?		Yes <input checked="" type="radio"/> No
-Were tamper/custody seals intact and uncompromised?		<input checked="" type="radio"/> Yes No NA
3. Shippers' packing slip attached to the cooler(s)?		<input checked="" type="radio"/> Yes No
4. Did custody papers accompany the sample(s)?		<input checked="" type="radio"/> Yes No
5. Were the custody papers relinquished & signed in the appropriate place?		<input checked="" type="radio"/> Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC?		Yes <input checked="" type="radio"/> No
7. Did all bottles arrive in good condition (Unbroken)?		<input checked="" type="radio"/> Yes No
8. Could all bottle labels be reconciled with the COC?		<input checked="" type="radio"/> Yes No
9. Were correct bottle(s) used for the test(s) indicated?		<input checked="" type="radio"/> Yes No
10. Sufficient quantity received to perform indicated analyses?		<input checked="" type="radio"/> Yes No
11. Are these work share samples?		Yes <input checked="" type="radio"/> No
If yes, Questions 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?		Yes No <input checked="" type="radio"/> NA pH Strip Lot# <u>HC902937</u>
13. Were VOAs on the COC?		<input checked="" type="radio"/> Yes No
14. Were air bubbles >6 mm in any VOA vials? Larger than this.		Yes <input checked="" type="radio"/> No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # <u>04177016</u>		<input checked="" type="radio"/> Yes No
16. Was a LL Hg or Me Hg trip blank present?		Yes <input checked="" type="radio"/> No
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____		
Concerning _____		
17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES		Samples processed by: <u>EL</u>
_____ _____ _____ _____		
18. 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)		
19. 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: _____		

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

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC