

ANALYTICAL REPORT

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

Laboratory Job ID: 240-112925-1
Client Project/Site: Ford LTP Livonia MI - E203631

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

Attn: Kristoffer Hinskey



Authorized for release by:
5/31/2019 3:20:23 PM

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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	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	10
QC Sample Results	11
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 Livonia MI - E203631

Job ID: 240-112925-1

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.
X	Surrogate is outside control limits

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)
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 Livonia MI - E203631

Job ID: 240-112925-1

Job ID: 240-112925-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP Livonia MI - E203631

Report Number: 240-112925-1

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 sample was received on 5/18/2019 10:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample MW-77_051619 (240-112925-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 05/27/2019.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for MW-77_051619 (240-112925-1). Refer to the QC report for details.

Surrogate recovery for the following sample was outside the upper control limit: MW-77_051619 (240-112925-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Sample MW-77_051619 (240-112925-1) was analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The sample was analyzed on 05/23/2019.

Case Narrative

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

Job ID: 240-112925-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

No analytical or quality issues were noted, other than those described above or 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 Livonia MI - E203631

Job ID: 240-112925-1

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 Livonia MI - E203631

Job ID: 240-112925-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-112925-1	MW-77_051619	Water	05/16/19 17:12	05/18/19 10:15	

- 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 Livonia MI - E203631

Job ID: 240-112925-1

Client Sample ID: MW-77_051619

Lab Sample ID: 240-112925-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.39	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	0.24	J	1.0	0.20	ug/L	1		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 Livonia MI - E203631

Job ID: 240-112925-1

Client Sample ID: MW-77_051619

Lab Sample ID: 240-112925-1

Date Collected: 05/16/19 17:12

Matrix: Water

Date Received: 05/18/19 10:15

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			05/23/19 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 125		05/23/19 17:17	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			05/27/19 00:28	1
cis-1,2-Dichloroethene	0.39	J	1.0	0.16	ug/L			05/27/19 00:28	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/27/19 00:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/27/19 00:28	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/27/19 00:28	1
Vinyl chloride	0.24	J	1.0	0.20	ug/L			05/27/19 00:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	131	X	70 - 121		05/27/19 00:28	1
4-Bromofluorobenzene (Surr)	70		59 - 120		05/27/19 00:28	1
Toluene-d8 (Surr)	76		70 - 123		05/27/19 00:28	1
Dibromofluoromethane (Surr)	126		75 - 128		05/27/19 00:28	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

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	BFB	TOL	DBFM
		(70-121)	(59-120)	(70-123)	(75-128)
240-112823-C-6 MS	Matrix Spike	121	96	88	108
240-112823-E-6 MSD	Matrix Spike Duplicate	108	86	82	102
240-112925-1	MW-77_051619	131 X	70	76	126
LCS 240-383175/4	Lab Control Sample	112	109	96	113
MB 240-383175/6	Method Blank	118	72	78	114

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
		(63-125)
240-112871-A-2 MS	Matrix Spike	88
240-112871-A-2 MSD	Matrix Spike Duplicate	91
240-112925-1	MW-77_051619	85
LCS 240-382738/4	Lab Control Sample	85
MB 240-382738/5	Method Blank	91

Surrogate Legend

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

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

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

Lab Sample ID: MB 240-383175/6
Matrix: Water
Analysis Batch: 383175

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			05/26/19 17:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/26/19 17:20	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/26/19 17:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/26/19 17:20	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/26/19 17:20	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/26/19 17:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		70 - 121		05/26/19 17:20	1
4-Bromofluorobenzene (Surr)	72		59 - 120		05/26/19 17:20	1
Toluene-d8 (Surr)	78		70 - 123		05/26/19 17:20	1
Dibromofluoromethane (Surr)	114		75 - 128		05/26/19 17:20	1

Lab Sample ID: LCS 240-383175/4
Matrix: Water
Analysis Batch: 383175

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	9.84		ug/L		98	65 - 139
cis-1,2-Dichloroethene	10.0	9.62		ug/L		96	76 - 128
Tetrachloroethene	10.0	11.9		ug/L		119	74 - 130
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	78 - 133
Trichloroethene	10.0	10.8		ug/L		108	76 - 125
Vinyl chloride	10.0	9.16		ug/L		92	58 - 143

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		70 - 121
4-Bromofluorobenzene (Surr)	109		59 - 120
Toluene-d8 (Surr)	96		70 - 123
Dibromofluoromethane (Surr)	113		75 - 128

Lab Sample ID: 240-112823-C-6 MS
Matrix: Water
Analysis Batch: 383175

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	10.0	9.91		ug/L		99	53 - 140
cis-1,2-Dichloroethene	1.0	U	10.0	9.56		ug/L		96	64 - 130
Tetrachloroethene	1.0	U	10.0	11.5		ug/L		115	51 - 136
trans-1,2-Dichloroethene	1.0	U	10.0	10.0		ug/L		100	68 - 133
Trichloroethene	1.0	U	10.0	10.4		ug/L		104	55 - 131
Vinyl chloride	1.0	U	10.0	8.51		ug/L		85	43 - 154

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	121		70 - 121
4-Bromofluorobenzene (Surr)	96		59 - 120
Toluene-d8 (Surr)	88		70 - 123

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

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

Lab Sample ID: 240-112823-C-6 MS
Matrix: Water
Analysis Batch: 383175

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

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	108		75 - 128

Lab Sample ID: 240-112823-E-6 MSD
Matrix: Water
Analysis Batch: 383175

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

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier				Limits		
1,1-Dichloroethene	1.0	U	10.0	9.89		ug/L		99	53 - 140	0	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.68		ug/L		97	64 - 130	1	21
Tetrachloroethene	1.0	U	10.0	11.0		ug/L		110	51 - 136	4	23
trans-1,2-Dichloroethene	1.0	U	10.0	9.65		ug/L		97	68 - 133	4	24
Trichloroethene	1.0	U	10.0	10.2		ug/L		102	55 - 131	2	23
Vinyl chloride	1.0	U	10.0	9.10		ug/L		91	43 - 154	7	29

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	108		70 - 121
4-Bromofluorobenzene (Surr)	86		59 - 120
Toluene-d8 (Surr)	82		70 - 123
Dibromofluoromethane (Surr)	102		75 - 128

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

Lab Sample ID: MB 240-382738/5
Matrix: Water
Analysis Batch: 382738

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			05/23/19 11:00	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	91		63 - 125		05/23/19 11:00	1

Lab Sample ID: LCS 240-382738/4
Matrix: Water
Analysis Batch: 382738

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
1,4-Dioxane	10.0	12.2		ug/L		122	59 - 131

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	85		63 - 125

Lab Sample ID: 240-112871-A-2 MS
Matrix: Water
Analysis Batch: 382738

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

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				Limits
1,4-Dioxane	2.0	U	10.0	12.2		ug/L		122	52 - 129

Eurofins TestAmerica, Canton

QC Sample Results

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

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)	88		63 - 125

Lab Sample ID: 240-112871-A-2 MSD
Matrix: Water
Analysis Batch: 382738

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	2.0	U	10.0	12.0		ug/L		120	52 - 129	2	13

<i>Surrogate</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	91		63 - 125

- 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 Livonia MI - E203631

Job ID: 240-112925-1

GC/MS VOA

Analysis Batch: 382738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112925-1	MW-77_051619	Total/NA	Water	8260B SIM	
MB 240-382738/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-382738/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-112871-A-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-112871-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 383175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-112925-1	MW-77_051619	Total/NA	Water	8260B	
MB 240-383175/6	Method Blank	Total/NA	Water	8260B	
LCS 240-383175/4	Lab Control Sample	Total/NA	Water	8260B	
240-112823-C-6 MS	Matrix Spike	Total/NA	Water	8260B	
240-112823-E-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

Client Sample ID: MW-77_051619

Lab Sample ID: 240-112925-1

Date Collected: 05/16/19 17:12

Matrix: Water

Date Received: 05/18/19 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	383175	05/27/19 00:28	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	382738	05/23/19 17:17	SAM	TAL CAN

Laboratory References:

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

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

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
 Project/Site: Ford LTP Livonia MI - E203631

Job ID: 240-112925-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19 *
Illinois	NELAP	5	200004	07-31-19 *
Iowa	State Program	7	421	06-01-21
Kansas	NELAP	7	E-10336	04-30-20
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19 *
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19 *
New York	NELAP	2	10975	03-31-20
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

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

Eurofins TestAmerica, Canton

Client Information		Lab Pk.		Carrier Tracking No(s)					
Company: ARCADIS U.S. Inc		Del/Monico, Michael		240-60548-25803.8					
Client Contact: Caitlin O'Neill		E-Mail: michael.delmonico@testamericainc.com		Page: 9 of 13					
Address: 28550 Cabot Drive Suite 500		City: Novi		Job #:					
State, Zip: MI, 48377		Due Date Requested:		Preservation Codes:					
Phone:		TAT Requested (days): 10		M - Hexane					
PO #: AM001318.0002.00002		PO #: MICHIGAN 190		N - Nono					
WC #: CADENA #		WC #: E203631		O - AsNsO2					
Email: Caitlin.O'Neill@arcadis.com		Project #: 24015353		P - Ni2O4S					
Project Name: Ford LTP Livonia MI - E203631		SSOW#:		Q - Ni2S2O3					
Site: Ford LTP (offsite)				R - Ni2S2O3					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soiled, Organics, In-Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - VOCs (Short List)	Total Number of Containers	Special Instructions/Note:
MW-77-08619	5-16-19	1712	6	Water	Yes	Yes	8260B, 8260B, SIM	6	
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					

240-112925 Chain of Custody

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input checked="" type="checkbox"/> Return To Client	<input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, M, Other (Specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: Caitlin O'Neill	Date: 5-16-19 / 1830	Received by: NEW GARD STORAGE	Date/Time: 5-16-19 1830
Relinquished by: Caitlin O'Neill	Date: 5/17/19 1200	Received by: [Signature]	Date/Time: 5-17-19 1224
Relinquished by: [Signature]	Date: 5-17-19 1530	Received by: [Signature]	Date/Time: 5-18-19 1015
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Company: ARCADIS	Company: ARCADIS
		Company: [Signature]	Company: [Signature]
		Company: [Signature]	Company: TU

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 112925

Client Arcadis Site Name _____ Cooler unpacked by: _____
 Cooler Received on 5-18-19 Opened on 5-18-19

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-8 (CF -0.2 °C) Observed Cooler Temp. 7.4 °C Corrected Cooler Temp. 2.2 °C
 IR GUN #36 (CF +0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes 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 NA pH Strip Lot# HC984738
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. 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 _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: JR

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: _____