

ANALYTICAL REPORT

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

Laboratory Job ID: 240-134918-1
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:
8/28/2020 2:59:44 PM
Jessica Rigdon, Project Management Assistant I
(330)966-9268

Jessica.Rigdon@Eurofinset.com

Designee for

Michael DelMonico, Project Manager I
(330)497-9396

Michael.DelMonico@Eurofinset.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	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	15
QC Sample Results	16
QC Association Summary	20
Lab Chronicle	21
Certification Summary	22
Chain of Custody	23

Definitions/Glossary

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

Job ID: 240-134918-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD 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: 240-134918-1

Job ID: 240-134918-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP Off-Site

Report Number: 240-134918-1

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 8/13/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2° C, 1.6° C and 5.3° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-134918-1), MW-100S_081120 (240-134918-2), MW-75D_081120 (240-134918-3), MW-75SR_081120 (240-134918-4), MW-99S_081120 (240-134918-5) and DUP-12 (240-134918-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 08/23/2020.

Vinyl chloride exceeded the RPD limit for the MSD of sample MW-100S-MSD_08112MSD (240-134918-2) in batch 240-448301.

Refer to the QC report for details.

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

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Samples MW-100S_081120 (240-134918-2), MW-75D_081120 (240-134918-3), MW-75SR_081120 (240-134918-4), MW-99S_081120 (240-134918-5) and DUP-12 (240-134918-6) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846

Case Narrative

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

Job ID: 240-134918-1

Job ID: 240-134918-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

Method 8260B SIM. The samples were analyzed on 08/21/2020 and 08/25/2020.

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 Off-Site

Job ID: 240-134918-1

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

- 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: 240-134918-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-134918-1	TRIP BLANK	Water	08/11/20 00:00	08/13/20 10:30	
240-134918-2	MW-100S_081120	Water	08/11/20 10:46	08/13/20 10:30	
240-134918-3	MW-75D_081120	Water	08/11/20 12:41	08/13/20 10:30	
240-134918-4	MW-75SR_081120	Water	08/11/20 14:21	08/13/20 10:30	
240-134918-5	MW-99S_081120	Water	08/11/20 15:56	08/13/20 10:30	
240-134918-6	DUP-12	Water	08/11/20 00:00	08/13/20 10:30	

- 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: 240-134918-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-134918-1

No Detections.

Client Sample ID: MW-100S_081120

Lab Sample ID: 240-134918-2

No Detections.

Client Sample ID: MW-75D_081120

Lab Sample ID: 240-134918-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		2.0	0.86	ug/L	1		8260B SIM	Total/NA
Vinyl chloride	2.2		1.0	0.50	ug/L	1		8260B	Total/NA

Client Sample ID: MW-75SR_081120

Lab Sample ID: 240-134918-4

No Detections.

Client Sample ID: MW-99S_081120

Lab Sample ID: 240-134918-5

No Detections.

Client Sample ID: DUP-12

Lab Sample ID: 240-134918-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA
Vinyl chloride	2.0		1.0	0.50	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 Off-Site

Job ID: 240-134918-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-134918-1

Date Collected: 08/11/20 00:00

Matrix: Water

Date Received: 08/13/20 10:30

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	0.46	ug/L			08/23/20 14:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 14:38	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 14:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 14:38	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 14:38	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			08/23/20 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 130		08/23/20 14:38	1
4-Bromofluorobenzene (Surr)	79		47 - 134		08/23/20 14:38	1
Toluene-d8 (Surr)	97		69 - 122		08/23/20 14:38	1
Dibromofluoromethane (Surr)	94		78 - 129		08/23/20 14:38	1

Client Sample Results

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

Job ID: 240-134918-1

Client Sample ID: MW-100S_081120

Lab Sample ID: 240-134918-2

Date Collected: 08/11/20 10:46

Matrix: Water

Date Received: 08/13/20 10:30

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			08/21/20 13:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 133		08/21/20 13:56	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	0.46	ug/L			08/23/20 15:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 15:00	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 15:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 15:00	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 15:00	1
Vinyl chloride	1.0	U F2	1.0	0.50	ug/L			08/23/20 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 130		08/23/20 15:00	1
4-Bromofluorobenzene (Surr)	80		47 - 134		08/23/20 15:00	1
Toluene-d8 (Surr)	96		69 - 122		08/23/20 15:00	1
Dibromofluoromethane (Surr)	95		78 - 129		08/23/20 15:00	1

Client Sample Results

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

Job ID: 240-134918-1

Client Sample ID: MW-75D_081120

Lab Sample ID: 240-134918-3

Date Collected: 08/11/20 12:41

Matrix: Water

Date Received: 08/13/20 10:30

Method: 8260B 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			08/21/20 15:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 133					08/21/20 15:10	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	0.46	ug/L			08/23/20 16:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 16:06	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 16:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 16:06	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 16:06	1
Vinyl chloride	2.2		1.0	0.50	ug/L			08/23/20 16:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 130					08/23/20 16:06	1
4-Bromofluorobenzene (Surr)	79		47 - 134					08/23/20 16:06	1
Toluene-d8 (Surr)	97		69 - 122					08/23/20 16:06	1
Dibromofluoromethane (Surr)	87		78 - 129					08/23/20 16:06	1

Client Sample Results

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

Job ID: 240-134918-1

Client Sample ID: MW-75SR_081120

Lab Sample ID: 240-134918-4

Date Collected: 08/11/20 14:21

Matrix: Water

Date Received: 08/13/20 10:30

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			08/21/20 15:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 133					08/21/20 15:35	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	0.46	ug/L			08/23/20 16:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 16:27	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 16:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 16:27	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 16:27	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			08/23/20 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 130					08/23/20 16:27	1
4-Bromofluorobenzene (Surr)	82		47 - 134					08/23/20 16:27	1
Toluene-d8 (Surr)	98		69 - 122					08/23/20 16:27	1
Dibromofluoromethane (Surr)	93		78 - 129					08/23/20 16:27	1

Client Sample Results

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

Job ID: 240-134918-1

Client Sample ID: MW-99S_081120

Lab Sample ID: 240-134918-5

Date Collected: 08/11/20 15:56

Matrix: Water

Date Received: 08/13/20 10:30

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			08/25/20 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		70 - 133		08/25/20 13:49	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	0.46	ug/L			08/23/20 16:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 16:49	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 16:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 16:49	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 16:49	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			08/23/20 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 130		08/23/20 16:49	1
4-Bromofluorobenzene (Surr)	81		47 - 134		08/23/20 16:49	1
Toluene-d8 (Surr)	99		69 - 122		08/23/20 16:49	1
Dibromofluoromethane (Surr)	94		78 - 129		08/23/20 16:49	1

Client Sample Results

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

Job ID: 240-134918-1

Client Sample ID: DUP-12

Lab Sample ID: 240-134918-6

Date Collected: 08/11/20 00:00

Matrix: Water

Date Received: 08/13/20 10:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.9		2.0	0.86	ug/L			08/21/20 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 133		08/21/20 16:00	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	0.46	ug/L			08/23/20 17:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 17:55	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 17:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 17:55	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 17:55	1
Vinyl chloride	2.0		1.0	0.50	ug/L			08/23/20 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		75 - 130		08/23/20 17:55	1
4-Bromofluorobenzene (Surr)	81		47 - 134		08/23/20 17:55	1
Toluene-d8 (Surr)	95		69 - 122		08/23/20 17:55	1
Dibromofluoromethane (Surr)	89		78 - 129		08/23/20 17:55	1

Surrogate Summary

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

Job ID: 240-134918-1

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)
240-134918-1	TRIP BLANK	109	79	97	94
240-134918-2	MW-100S_081120	107	80	96	95
240-134918-2 MS	MW-100S-MS_08112	96	98	100	87
240-134918-2 MSD	MW-100S-MSD_08112	95	95	100	88
240-134918-3	MW-75D_081120	103	79	97	87
240-134918-4	MW-75SR_081120	108	82	98	93
240-134918-5	MW-99S_081120	110	81	99	94
240-134918-5 MS	MW-99S-MS_081120	97	97	100	92
240-134918-5 MSD	MW-99S-MSD_081120	96	100	101	86
240-134918-6	DUP-12	107	81	95	89
LCS 240-448301/4	Lab Control Sample	94	98	102	91
MB 240-448301/7	Method Blank	105	80	98	92

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)
240-134918-2	MW-100S_081120	89
240-134918-2 MS	MW-100S-MS_08112	88
240-134918-2 MSD	MW-100S-MSD_08112	90
240-134918-3	MW-75D_081120	88
240-134918-4	MW-75SR_081120	92
240-134918-5	MW-99S_081120	84
240-134918-5 MS	MW-99S-MS_081120	84
240-134918-5 MSD	MW-99S-MSD_081120	85
240-134918-6	DUP-12	90
LCS 240-448101/4	Lab Control Sample	86
LCS 240-448596/4	Lab Control Sample	86
MB 240-448101/5	Method Blank	84
MB 240-448596/5	Method Blank	84

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-134918-1

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

Lab Sample ID: MB 240-448301/7
Matrix: Water
Analysis Batch: 448301

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	0.46	ug/L			08/23/20 13:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.38	ug/L			08/23/20 13:33	1
Tetrachloroethene	1.0	U	1.0	0.33	ug/L			08/23/20 13:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.43	ug/L			08/23/20 13:33	1
Trichloroethene	1.0	U	1.0	0.36	ug/L			08/23/20 13:33	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			08/23/20 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 130		08/23/20 13:33	1
4-Bromofluorobenzene (Surr)	80		47 - 134		08/23/20 13:33	1
Toluene-d8 (Surr)	98		69 - 122		08/23/20 13:33	1
Dibromofluoromethane (Surr)	92		78 - 129		08/23/20 13:33	1

Lab Sample ID: LCS 240-448301/4
Matrix: Water
Analysis Batch: 448301

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	8.91		ug/L		89	73 - 129
cis-1,2-Dichloroethene	10.0	9.91		ug/L		99	75 - 124
Tetrachloroethene	10.0	10.4		ug/L		104	70 - 125
trans-1,2-Dichloroethene	10.0	9.38		ug/L		94	74 - 130
Trichloroethene	10.0	9.07		ug/L		91	71 - 121
Vinyl chloride	10.0	8.59		ug/L		86	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		75 - 130
4-Bromofluorobenzene (Surr)	98		47 - 134
Toluene-d8 (Surr)	102		69 - 122
Dibromofluoromethane (Surr)	91		78 - 129

Lab Sample ID: 240-134918-2 MS
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-100S-MS_08112
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	8.70		ug/L		87	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.07		ug/L		91	68 - 121
Tetrachloroethene	1.0	U	10.0	9.74		ug/L		97	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	8.94		ug/L		89	69 - 126
Trichloroethene	1.0	U	10.0	8.47		ug/L		85	56 - 124
Vinyl chloride	1.0	U F2	10.0	6.06		ug/L		61	49 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		75 - 130
4-Bromofluorobenzene (Surr)	98		47 - 134
Toluene-d8 (Surr)	100		69 - 122

QC Sample Results

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

Job ID: 240-134918-1

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

Lab Sample ID: 240-134918-2 MS
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-100S-MS_08112
Prep Type: Total/NA

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
<i>Dibromofluoromethane (Surr)</i>	87		78 - 129

Lab Sample ID: 240-134918-2 MSD
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-100S-MSD_08112
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	10.0	8.48		ug/L		85	64 - 132	3	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.09		ug/L		91	68 - 121	0	35
Tetrachloroethene	1.0	U	10.0	9.54		ug/L		95	52 - 129	2	35
trans-1,2-Dichloroethene	1.0	U	10.0	8.91		ug/L		89	69 - 126	0	35
Trichloroethene	1.0	U	10.0	8.68		ug/L		87	56 - 124	2	35
Vinyl chloride	1.0	U F2	10.0	8.92	F2	ug/L		89	49 - 136	38	35

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	95		75 - 130
<i>4-Bromofluorobenzene (Surr)</i>	95		47 - 134
<i>Toluene-d8 (Surr)</i>	100		69 - 122
<i>Dibromofluoromethane (Surr)</i>	88		78 - 129

Lab Sample ID: 240-134918-5 MS
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-99S-MS_081120
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	8.69		ug/L		87	64 - 132		
cis-1,2-Dichloroethene	1.0	U	10.0	9.21		ug/L		92	68 - 121		
Tetrachloroethene	1.0	U	10.0	9.50		ug/L		95	52 - 129		
trans-1,2-Dichloroethene	1.0	U	10.0	8.77		ug/L		88	69 - 126		
Trichloroethene	1.0	U	10.0	8.60		ug/L		86	56 - 124		
Vinyl chloride	1.0	U	10.0	7.52		ug/L		75	49 - 136		

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	97		75 - 130
<i>4-Bromofluorobenzene (Surr)</i>	97		47 - 134
<i>Toluene-d8 (Surr)</i>	100		69 - 122
<i>Dibromofluoromethane (Surr)</i>	92		78 - 129

Lab Sample ID: 240-134918-5 MSD
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-99S-MSD_081120
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	10.0	8.33		ug/L		83	64 - 132	4	35
cis-1,2-Dichloroethene	1.0	U	10.0	9.13		ug/L		91	68 - 121	1	35
Tetrachloroethene	1.0	U	10.0	9.80		ug/L		98	52 - 129	3	35
trans-1,2-Dichloroethene	1.0	U	10.0	8.90		ug/L		89	69 - 126	1	35
Trichloroethene	1.0	U	10.0	8.64		ug/L		86	56 - 124	0	35

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-134918-1

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

Lab Sample ID: 240-134918-5 MSD
Matrix: Water
Analysis Batch: 448301

Client Sample ID: MW-99S-MSD_081120
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	1.0	U	10.0	8.63		ug/L		86	49 - 136	14	35
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	96		75 - 130								
4-Bromofluorobenzene (Surr)	100		47 - 134								
Toluene-d8 (Surr)	101		69 - 122								
Dibromofluoromethane (Surr)	86		78 - 129								

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

Lab Sample ID: MB 240-448101/5
Matrix: Water
Analysis Batch: 448101

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			08/21/20 06:30	1
MB MB									
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,2-Dichloroethane-d4 (Surr)	84		70 - 133		08/21/20 06:30	1			

Lab Sample ID: LCS 240-448101/4
Matrix: Water
Analysis Batch: 448101

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	10.0		ug/L		100	80 - 135
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	86		70 - 133				

Lab Sample ID: 240-134918-2 MS
Matrix: Water
Analysis Batch: 448101

Client Sample ID: MW-100S-MS_08112
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	10.1		ug/L		101	46 - 170
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	88		70 - 133						

Lab Sample ID: 240-134918-2 MSD
Matrix: Water
Analysis Batch: 448101

Client Sample ID: MW-100S-MSD_08112
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	10.4		ug/L		104	46 - 170	4	26

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-134918-1

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

Lab Sample ID: 240-134918-2 MSD
Matrix: Water
Analysis Batch: 448101

Client Sample ID: MW-100S-MSD_08112
Prep Type: Total/NA

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	90		70 - 133

Lab Sample ID: MB 240-448596/5
Matrix: Water
Analysis Batch: 448596

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

<u>Analyte</u>	<u>MB</u> <u>Result</u>	<u>MB</u> <u>Qualifier</u>	<u>RL</u>	<u>MDL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
1,4-Dioxane	2.0	U	2.0	0.86	ug/L	-		08/25/20 13:00	1

<u>Surrogate</u>	<u>MB</u> <u>%Recovery</u>	<u>MB</u> <u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
1,2-Dichloroethane-d4 (Surr)	84		70 - 133		08/25/20 13:00	1

Lab Sample ID: LCS 240-448596/4
Matrix: Water
Analysis Batch: 448596

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

<u>Analyte</u>	<u>Spike</u> <u>Added</u>	<u>LCS</u> <u>Result</u>	<u>LCS</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec.</u> <u>Limits</u>
1,4-Dioxane	10.0	10.8		ug/L	-	108	80 - 135

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	86		70 - 133

Lab Sample ID: 240-134918-5 MS
Matrix: Water
Analysis Batch: 448596

Client Sample ID: MW-99S-MS_081120
Prep Type: Total/NA

<u>Analyte</u>	<u>Sample</u> <u>Result</u>	<u>Sample</u> <u>Qualifier</u>	<u>Spike</u> <u>Added</u>	<u>MS</u> <u>Result</u>	<u>MS</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec.</u> <u>Limits</u>
1,4-Dioxane	2.0	U	10.0	9.78		ug/L	-	98	46 - 170

<u>Surrogate</u>	<u>MS</u> <u>%Recovery</u>	<u>MS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	84		70 - 133

Lab Sample ID: 240-134918-5 MSD
Matrix: Water
Analysis Batch: 448596

Client Sample ID: MW-99S-MSD_081120
Prep Type: Total/NA

<u>Analyte</u>	<u>Sample</u> <u>Result</u>	<u>Sample</u> <u>Qualifier</u>	<u>Spike</u> <u>Added</u>	<u>MSD</u> <u>Result</u>	<u>MSD</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec.</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>Limit</u>
1,4-Dioxane	2.0	U	10.0	9.56		ug/L	-	96	46 - 170	2	26

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	85		70 - 133

QC Association Summary

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

Job ID: 240-134918-1

GC/MS VOA

Analysis Batch: 448101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134918-2	MW-100S_081120	Total/NA	Water	8260B SIM	
240-134918-3	MW-75D_081120	Total/NA	Water	8260B SIM	
240-134918-4	MW-75SR_081120	Total/NA	Water	8260B SIM	
240-134918-6	DUP-12	Total/NA	Water	8260B SIM	
MB 240-448101/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-448101/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-134918-2 MS	MW-100S-MS_08112	Total/NA	Water	8260B SIM	
240-134918-2 MSD	MW-100S-MSD_08112	Total/NA	Water	8260B SIM	

Analysis Batch: 448301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134918-1	TRIP BLANK	Total/NA	Water	8260B	
240-134918-2	MW-100S_081120	Total/NA	Water	8260B	
240-134918-3	MW-75D_081120	Total/NA	Water	8260B	
240-134918-4	MW-75SR_081120	Total/NA	Water	8260B	
240-134918-5	MW-99S_081120	Total/NA	Water	8260B	
240-134918-6	DUP-12	Total/NA	Water	8260B	
MB 240-448301/7	Method Blank	Total/NA	Water	8260B	
LCS 240-448301/4	Lab Control Sample	Total/NA	Water	8260B	
240-134918-2 MS	MW-100S-MS_08112	Total/NA	Water	8260B	
240-134918-2 MSD	MW-100S-MSD_08112	Total/NA	Water	8260B	
240-134918-5 MS	MW-99S-MS_081120	Total/NA	Water	8260B	
240-134918-5 MSD	MW-99S-MSD_081120	Total/NA	Water	8260B	

Analysis Batch: 448596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-134918-5	MW-99S_081120	Total/NA	Water	8260B SIM	
MB 240-448596/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-448596/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-134918-5 MS	MW-99S-MS_081120	Total/NA	Water	8260B SIM	
240-134918-5 MSD	MW-99S-MSD_081120	Total/NA	Water	8260B SIM	

Lab Chronicle

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

Job ID: 240-134918-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-134918-1

Date Collected: 08/11/20 00:00

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 14:38	LEE	TAL CAN

Client Sample ID: MW-100S_081120

Lab Sample ID: 240-134918-2

Date Collected: 08/11/20 10:46

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 15:00	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	448101	08/21/20 13:56	SAM	TAL CAN

Client Sample ID: MW-75D_081120

Lab Sample ID: 240-134918-3

Date Collected: 08/11/20 12:41

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 16:06	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	448101	08/21/20 15:10	SAM	TAL CAN

Client Sample ID: MW-75SR_081120

Lab Sample ID: 240-134918-4

Date Collected: 08/11/20 14:21

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 16:27	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	448101	08/21/20 15:35	SAM	TAL CAN

Client Sample ID: MW-99S_081120

Lab Sample ID: 240-134918-5

Date Collected: 08/11/20 15:56

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 16:49	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	448596	08/25/20 13:49	SAM	TAL CAN

Client Sample ID: DUP-12

Lab Sample ID: 240-134918-6

Date Collected: 08/11/20 00:00

Matrix: Water

Date Received: 08/13/20 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	448301	08/23/20 17:55	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	448101	08/21/20 16:00	SAM	TAL CAN

Laboratory References:

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

Eurofins TestAmerica, Canton

Accreditation/Certification Summary

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

Job ID: 240-134918-1

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	07-31-20 *
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	06-30-21
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

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



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: Arcadis
Address: 28550 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

Site Contact: Julia McClafferty
Telephone: 734-644-5131
Email: kristoffer.hinsley@arcadis.com

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

Sampler Name: Gary Schaefer
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	ZnAc/NaOH	Uptes			Other:	1,1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B	PCE 8260B	TCE 8260B	Vinyl Chloride 8260B		1,4-Dioxane 8260B SIM
TRIP BLANK	8/11/20		X																					2 TRIP BLANKS
MW-1005-081120	8/11/20	10:46	X																					3 VOASER B260B 3 VOAS for 8260B SIM
MW-1005-MS-081120	8/11/20	10:46	X																					Run MS
MW-1005-MSD-081120	8/11/20	10:46	X																					Run MSD
MW-75D-081120	8/11/20	12:41	X																					
MW-75SR-081120	8/11/20	14:21	X																					
MW-99S-081120	8/11/20	15:56	X																					
MW-99S-MS-081120	8/11/20	15:56	X																					Run MS
MW-99S-MSD-081120	8/11/20	15:56	X																					Run MSD
DUP-12	8/11/20		X																					

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements & Comments:
 Irritant Poison B Unknown
 Lammable Non-Hazard

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
<i>Gary Schaefer</i>	Arcadis	8/11/20 1735	Nov. Cold Storage	Nicosis	8/11/20 1736
<i>Kyle H</i>	Arcadis	8/12/20 1500	<i>W</i>	ENRDFW	8/12/20 1500
			Received in Laboratory of	Comgas	8-13-20 830

Barcode: [Barcode]
 240-134918 Chain of Custody


Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 134918

Client Arcadis Site Name _____ Cooler unpacked by [Signature]
 Cooler Received on 8-13-20 Opened on 8-13-20

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____
Receipt After-hours: Drop-off Date/Time _____ **Storage Location** _____

TestAmerica Cooler # NA 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-10 (CF +0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °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 3 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
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC911298
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # NA 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: _____

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: _____

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form

Cooler Description (Circle)				IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)		
<u>TA</u>	Client	Box	Other	IR-10 IR-11	0.3	1.2	Wet Ice	Blue Ice	Dry Ice
							Water	None	
<u>TA</u>	Client	Box	Other	IR-10 IR-11	4.4	5.3	Wet Ice	Blue Ice	Dry Ice
							Water	None	
<u>TA</u>	Client	Box	Other	IR-10 IR-11	0.7	1.6	Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	
TA	Client	Box	Other	IR-10 IR-11			Wet Ice	Blue Ice	Dry Ice
							Water	None	

See Temperature Excursion Form