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ANALYTICAL REPORT

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

Laboratory Job ID: 240-126152-1
Client Project/Site: Ford LTP On Site

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

Attn: Kristoffer Hinskey

Authorized for release by:
2/26/2020 12:05:37 PM

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Table of Contents

Definitions/Glossary

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

Job ID: 240-126152-1

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)
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)

Job ID: 240-126152-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP On Site

Report Number: 240-126152-1

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 2/12/2020 8:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-126152-1), MW-194_021020 (240-126152-2), MW-194S_021020 (240-126152-3), MW-195S_021020 (240-126152-4), MW-66_021020 (240-126152-5), MW-22_021020 (240-126152-6) and DUP-13 (240-126152-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/17/2020 and 02/20/2020.

Samples MW-195S_021020 (240-126152-4)[100X], MW-22_021020 (240-126152-6)[66.67X] and DUP-13 (240-126152-7)[66.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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-194_021020 (240-126152-2), MW-194S_021020 (240-126152-3), MW-195S_021020 (240-126152-4), MW-66_021020 (240-126152-5), MW-22_021020 (240-126152-6) and DUP-13 (240-126152-7) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 02/14/2020.

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 On Site

Job ID: 240-126152-1

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: 240-126152-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-126152-1	TRIP BLANK	Water	02/10/20 00:00	02/12/20 08:10	
240-126152-2	MW-194_021020	Water	02/10/20 10:26	02/12/20 08:10	
240-126152-3	MW-194S_021020	Water	02/10/20 11:21	02/12/20 08:10	
240-126152-4	MW-195S_021020	Water	02/10/20 12:36	02/12/20 08:10	
240-126152-5	MW-66_021020	Water	02/10/20 14:40	02/12/20 08:10	
240-126152-6	MW-22_021020	Water	02/10/20 16:21	02/12/20 08:10	
240-126152-7	DUP-13	Water	02/10/20 00:00	02/12/20 08:10	

Detection Summary

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

Job ID: 240-126152-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 240-126152-1

No Detections.

Client Sample ID: MW-194_021020 — Lab Sample ID: 240-126152-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MW-194S_021020 — Lab Sample ID: 240-126152-3

No Detections.

Client Sample ID: MW-195S_021020 — Lab Sample ID: 240-126152-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	82	J	100	16	ug/L	100		8260B	Total/NA
trans-1,2-Dichloroethene	100		100	19	ug/L	100		8260B	Total/NA
Trichloroethene	2300		100	10	ug/L	100		8260B	Total/NA

Client Sample ID: MW-66_021020 — Lab Sample ID: 240-126152-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.4		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MW-22_021020 — Lab Sample ID: 240-126152-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	15		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	110		67	11	ug/L	66.67		8260B	Total/NA
Vinyl chloride	1300		67	13	ug/L	66.67		8260B	Total/NA

Client Sample ID: DUP-13 — Lab Sample ID: 240-126152-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	14		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	100		67	11	ug/L	66.67		8260B	Total/NA
Vinyl chloride	1300		67	13	ug/L	66.67		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 240-126152-1

Client Sample ID: TRIP BLANK
Date Collected: 02/10/20 00:00
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-1
Matrix: Water

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			02/17/20 20:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/17/20 20:57	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/17/20 20:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/17/20 20:57	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/17/20 20:57	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			02/17/20 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 130*		*02/17/20 20:57*	*1*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*		*02/17/20 20:57*	*1*
Toluene-d8 (Surr)	*93*		*69 - 122*		*02/17/20 20:57*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*02/17/20 20:57*	*1*

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

Job ID: 240-126152-1

Client Sample ID: MW-194_021020
Date Collected: 02/10/20 10:26
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.7	J	2.0	0.86	ug/L			02/14/20 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 133*		*02/14/20 18:29*	*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			02/17/20 21:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/17/20 21:22	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/17/20 21:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/17/20 21:22	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/17/20 21:22	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			02/17/20 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*02/17/20 21:22*	*1*
4-Bromofluorobenzene (Surr)	*101*		*47 - 134*		*02/17/20 21:22*	*1*
Toluene-d8 (Surr)	*95*		*69 - 122*		*02/17/20 21:22*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*02/17/20 21:22*	*1*

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

Job ID: 240-126152-1

Client Sample ID: MW-194S_021020
Date Collected: 02/10/20 11:21
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-3
Matrix: Water

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			02/14/20 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 133*		*02/14/20 18:54*	*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			02/17/20 21:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/17/20 21:47	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/17/20 21:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/17/20 21:47	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/17/20 21:47	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			02/17/20 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 130*		*02/17/20 21:47*	*1*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*		*02/17/20 21:47*	*1*
Toluene-d8 (Surr)	*92*		*69 - 122*		*02/17/20 21:47*	*1*
Dibromofluoromethane (Surr)	*88*		*78 - 129*		*02/17/20 21:47*	*1*

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

Job ID: 240-126152-1

Client Sample ID: MW-195S_021020
Date Collected: 02/10/20 12:36
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-4
Matrix: Water

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			02/14/20 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 133*		*02/14/20 19:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	100	U	100	19	ug/L			02/17/20 22:12	100
cis-1,2-Dichloroethene	**82**	**J**	100	16	ug/L			02/17/20 22:12	100
Tetrachloroethene	100	U	100	15	ug/L			02/17/20 22:12	100
trans-1,2-Dichloroethene	**100**		100	19	ug/L			02/17/20 22:12	100
Trichloroethene	**2300**		100	10	ug/L			02/17/20 22:12	100
Vinyl chloride	100	U	100	20	ug/L			02/17/20 22:12	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*		*02/17/20 22:12*	*100*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*		*02/17/20 22:12*	*100*
Toluene-d8 (Surr)	*95*		*69 - 122*		*02/17/20 22:12*	*100*
Dibromofluoromethane (Surr)	*85*		*78 - 129*		*02/17/20 22:12*	*100*

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

Job ID: 240-126152-1

Client Sample ID: MW-66_021020
Date Collected: 02/10/20 14:40
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-5
Matrix: Water

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			02/14/20 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 133*		*02/14/20 19:45*	*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			02/17/20 22:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/17/20 22:37	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/17/20 22:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/17/20 22:37	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/17/20 22:37	1
Vinyl chloride	**2.4**		1.0	0.20	ug/L			02/17/20 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 130*		*02/17/20 22:37*	*1*
4-Bromofluorobenzene (Surr)	*107*		*47 - 134*		*02/17/20 22:37*	*1*
Toluene-d8 (Surr)	*96*		*69 - 122*		*02/17/20 22:37*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*02/17/20 22:37*	*1*

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

Job ID: 240-126152-1

Client Sample ID: MW-22_021020
Date Collected: 02/10/20 16:21
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**15**		2.0	0.86	ug/L			02/14/20 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 133*		*02/14/20 20:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	67	U	67	13	ug/L			02/20/20 15:48	66.67
cis-1,2-Dichloroethene	**110**		67	11	ug/L			02/20/20 15:48	66.67
Tetrachloroethene	67	U	67	10	ug/L			02/20/20 15:48	66.67
trans-1,2-Dichloroethene	67	U	67	13	ug/L			02/20/20 15:48	66.67
Trichloroethene	67	U	67	6.7	ug/L			02/20/20 15:48	66.67
Vinyl chloride	**1300**		67	13	ug/L			02/20/20 15:48	66.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*75 - 130*		*02/20/20 15:48*	*66.67*
4-Bromofluorobenzene (Surr)	*66*		*47 - 134*		*02/20/20 15:48*	*66.67*
Toluene-d8 (Surr)	*89*		*69 - 122*		*02/20/20 15:48*	*66.67*
Dibromofluoromethane (Surr)	*122*		*78 - 129*		*02/20/20 15:48*	*66.67*

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

Job ID: 240-126152-1

Client Sample ID: DUP-13
Date Collected: 02/10/20 00:00
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**14**		2.0	0.86	ug/L			02/14/20 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 133*		*02/14/20 20:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	67	U	67	13	ug/L			02/20/20 16:12	66.67
cis-1,2-Dichloroethene	**100**		67	11	ug/L			02/20/20 16:12	66.67
Tetrachloroethene	67	U	67	10	ug/L			02/20/20 16:12	66.67
trans-1,2-Dichloroethene	67	U	67	13	ug/L			02/20/20 16:12	66.67
Trichloroethene	67	U	67	6.7	ug/L			02/20/20 16:12	66.67
Vinyl chloride	**1300**		67	13	ug/L			02/20/20 16:12	66.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*02/20/20 16:12*	*66.67*
4-Bromofluorobenzene (Surr)	*67*		*47 - 134*		*02/20/20 16:12*	*66.67*
Toluene-d8 (Surr)	*91*		*69 - 122*		*02/20/20 16:12*	*66.67*
Dibromofluoromethane (Surr)	*122*		*78 - 129*		*02/20/20 16:12*	*66.67*

Surrogate Summary

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

Job ID: 240-126152-1

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)
190-22324-G-6 MS	Matrix Spike	95	95	97	96
190-22324-H-6 MSD	Matrix Spike Duplicate	95	95	97	98
240-126098-D-3 MS	Matrix Spike	87	102	94	91
240-126098-D-3 MSD	Matrix Spike Duplicate	85	104	93	90
240-126152-1	TRIP BLANK	83	102	93	86
240-126152-2	MW-194_021020	87	101	95	86
240-126152-3	MW-194S_021020	85	103	92	88
240-126152-4	MW-195S_021020	87	103	95	85
240-126152-5	MW-66_021020	83	107	96	86
240-126152-6	MW-22_021020	111	66	89	122
240-126152-7	DUP-13	109	67	91	122
LCS 240-423052/4	Lab Control Sample	87	103	94	90
LCS 240-423592/4	Lab Control Sample	96	95	96	99
MB 240-423052/7	Method Blank	83	103	93	86
MB 240-423592/7	Method Blank	109	64	89	116

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)
240-126097-C-5 MS	Matrix Spike	102
240-126097-C-5 MSD	Matrix Spike Duplicate	101
240-126152-2	MW-194_021020	99
240-126152-3	MW-194S_021020	100
240-126152-4	MW-195S_021020	104
240-126152-5	MW-66_021020	100
240-126152-6	MW-22_021020	106
240-126152-7	DUP-13	107
LCS 240-422866/4	Lab Control Sample	97
MB 240-422866/5	Method Blank	98

Surrogate Legend

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

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

Lab Sample ID: MB 240-423052/7
Matrix: Water
Analysis Batch: 423052

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			02/17/20 14:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/17/20 14:14	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/17/20 14:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/17/20 14:14	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/17/20 14:14	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			02/17/20 14:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*75 - 130*		*02/17/20 14:14*	*1*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*		*02/17/20 14:14*	*1*
Toluene-d8 (Surr)	*93*		*69 - 122*		*02/17/20 14:14*	*1*
Dibromofluoromethane (Surr)	*86*		*78 - 129*		*02/17/20 14:14*	*1*

Lab Sample ID: LCS 240-423052/4
Matrix: Water
Analysis Batch: 423052

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	10.3		ug/L		103	73 - 129
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	75 - 124
Tetrachloroethene	10.0	9.58		ug/L		96	70 - 125
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	74 - 130
Trichloroethene	10.0	9.60		ug/L		96	71 - 121
Vinyl chloride	10.0	10.9		ug/L		109	61 - 134

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*
4-Bromofluorobenzene (Surr)	*103*		*47 - 134*
Toluene-d8 (Surr)	*94*		*69 - 122*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Lab Sample ID: 240-126098-D-3 MS
Matrix: Water
Analysis Batch: 423052

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	13	U	133	129		ug/L		97	64 - 132
cis-1,2-Dichloroethene	91		133	225		ug/L		100	68 - 121
Tetrachloroethene	13	U	133	116		ug/L		87	52 - 129
trans-1,2-Dichloroethene	13	U	133	135		ug/L		101	69 - 126
Trichloroethene	13	U	133	113		ug/L		85	56 - 124
Vinyl chloride	370		133	516		ug/L		107	49 - 136

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 130*
4-Bromofluorobenzene (Surr)	*102*		*47 - 134*
Toluene-d8 (Surr)	*94*		*69 - 122*

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

Lab Sample ID: 240-126098-D-3 MS
Matrix: Water
Analysis Batch: 423052

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	*91*		*78 - 129*

Lab Sample ID: 240-126098-D-3 MSD
Matrix: Water
Analysis Batch: 423052

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	13	U	133	126		ug/L		95	64 - 132	2	35
cis-1,2-Dichloroethene	91		133	228		ug/L		103	68 - 121	1	35
Tetrachloroethene	13	U	133	115		ug/L		86	52 - 129	1	35
trans-1,2-Dichloroethene	13	U	133	130		ug/L		98	69 - 126	3	35
Trichloroethene	13	U	133	113		ug/L		84	56 - 124	0	35
Vinyl chloride	370		133	491		ug/L		88	49 - 136	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 130*
4-Bromofluorobenzene (Surr)	*104*		*47 - 134*
Toluene-d8 (Surr)	*93*		*69 - 122*
Dibromofluoromethane (Surr)	*90*		*78 - 129*

Lab Sample ID: MB 240-423592/7
Matrix: Water
Analysis Batch: 423592

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			02/20/20 15:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			02/20/20 15:25	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			02/20/20 15:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/20/20 15:25	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			02/20/20 15:25	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			02/20/20 15:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*109*		*75 - 130*		*02/20/20 15:25*	*1*
4-Bromofluorobenzene (Surr)	*64*		*47 - 134*		*02/20/20 15:25*	*1*
Toluene-d8 (Surr)	*89*		*69 - 122*		*02/20/20 15:25*	*1*
Dibromofluoromethane (Surr)	*116*		*78 - 129*		*02/20/20 15:25*	*1*

Lab Sample ID: LCS 240-423592/4
Matrix: Water
Analysis Batch: 423592

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	10.6		ug/L		106	73 - 129
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	75 - 124
Tetrachloroethene	10.0	10.8		ug/L		108	70 - 125
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	74 - 130
Trichloroethene	10.0	11.1		ug/L		111	71 - 121

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

Lab Sample ID: LCS 240-423592/4
Matrix: Water
Analysis Batch: 423592

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Vinyl chloride			10.0	7.36		ug/L		74	61 - 134		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 130*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*
Toluene-d8 (Surr)	*96*		*69 - 122*
Dibromofluoromethane (Surr)	*99*		*78 - 129*

Lab Sample ID: 190-22324-G-6 MS
Matrix: Water
Analysis Batch: 423592

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	64 - 132		
cis-1,2-Dichloroethene	1.0	U	10.0	10.4		ug/L		104	68 - 121		
Tetrachloroethene	1.0	U	10.0	10.5		ug/L		105	52 - 129		
trans-1,2-Dichloroethene	1.0	U	10.0	11.0		ug/L		110	69 - 126		
Trichloroethene	1.0	U	10.0	10.1		ug/L		101	56 - 124		
Vinyl chloride	1.0	U	10.0	7.02		ug/L		70	49 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*
Toluene-d8 (Surr)	*97*		*69 - 122*
Dibromofluoromethane (Surr)	*96*		*78 - 129*

Lab Sample ID: 190-22324-H-6 MSD
Matrix: Water
Analysis Batch: 423592

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	10.0	10.2		ug/L		102	64 - 132	2	35
cis-1,2-Dichloroethene	1.0	U	10.0	10.8		ug/L		108	68 - 121	4	35
Tetrachloroethene	1.0	U	10.0	10.3		ug/L		103	52 - 129	2	35
trans-1,2-Dichloroethene	1.0	U	10.0	11.3		ug/L		113	69 - 126	3	35
Trichloroethene	1.0	U	10.0	9.79		ug/L		98	56 - 124	3	35
Vinyl chloride	1.0	U	10.0	7.15		ug/L		72	49 - 136	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 130*
4-Bromofluorobenzene (Surr)	*95*		*47 - 134*
Toluene-d8 (Surr)	*97*		*69 - 122*
Dibromofluoromethane (Surr)	*98*		*78 - 129*

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

Lab Sample ID: MB 240-422866/5
Matrix: Water
Analysis Batch: 422866

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			02/14/20 12:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 133*		*02/14/20 12:34*	*1*

Lab Sample ID: LCS 240-422866/4
Matrix: Water
Analysis Batch: 422866

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	11.2		ug/L		112	80 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 133*

Lab Sample ID: 240-126097-C-5 MS
Matrix: Water
Analysis Batch: 422866

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	9.37		ug/L		78	46 - 170		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 133*

Lab Sample ID: 240-126097-C-5 MSD
Matrix: Water
Analysis Batch: 422866

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.5	J	10.0	9.08		ug/L		75	46 - 170	3	26

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 133*

GC/MS VOA

Analysis Batch: 422866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126152-2	MW-194_021020	Total/NA	Water	8260B SIM	
240-126152-3	MW-194S_021020	Total/NA	Water	8260B SIM	
240-126152-4	MW-195S_021020	Total/NA	Water	8260B SIM	
240-126152-5	MW-66_021020	Total/NA	Water	8260B SIM	
240-126152-6	MW-22_021020	Total/NA	Water	8260B SIM	
240-126152-7	DUP-13	Total/NA	Water	8260B SIM	
MB 240-422866/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-422866/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-126097-C-5 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-126097-C-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 423052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126152-1	TRIP BLANK	Total/NA	Water	8260B	
240-126152-2	MW-194_021020	Total/NA	Water	8260B	
240-126152-3	MW-194S_021020	Total/NA	Water	8260B	
240-126152-4	MW-195S_021020	Total/NA	Water	8260B	
240-126152-5	MW-66_021020	Total/NA	Water	8260B	
MB 240-423052/7	Method Blank	Total/NA	Water	8260B	
LCS 240-423052/4	Lab Control Sample	Total/NA	Water	8260B	
240-126098-D-3 MS	Matrix Spike	Total/NA	Water	8260B	
240-126098-D-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 423592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-126152-6	MW-22_021020	Total/NA	Water	8260B	
240-126152-7	DUP-13	Total/NA	Water	8260B	
MB 240-423592/7	Method Blank	Total/NA	Water	8260B	
LCS 240-423592/4	Lab Control Sample	Total/NA	Water	8260B	
190-22324-G-6 MS	Matrix Spike	Total/NA	Water	8260B	
190-22324-H-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

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

Job ID: 240-126152-1

Client Sample ID: TRIP BLANK
Date Collected: 02/10/20 00:00
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	423052	02/17/20 20:57	LRW	TAL CAN

Client Sample ID: MW-194_021020
Date Collected: 02/10/20 10:26
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	423052	02/17/20 21:22	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 18:29	TJL2	TAL CAN

Client Sample ID: MW-194S_021020
Date Collected: 02/10/20 11:21
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	423052	02/17/20 21:47	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 18:54	TJL2	TAL CAN

Client Sample ID: MW-195S_021020
Date Collected: 02/10/20 12:36
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	423052	02/17/20 22:12	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 19:20	TJL2	TAL CAN

Client Sample ID: MW-66_021020
Date Collected: 02/10/20 14:40
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	423052	02/17/20 22:37	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 19:45	TJL2	TAL CAN

Client Sample ID: MW-22_021020
Date Collected: 02/10/20 16:21
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	423592	02/20/20 15:48	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 20:11	TJL2	TAL CAN

Lab Chronicle

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

Job ID: 240-126152-1

Client Sample ID: DUP-13

Date Collected: 02/10/20 00:00
Date Received: 02/12/20 08:10

Lab Sample ID: 240-126152-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		66.67	423592	02/20/20 16:12	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	422866	02/14/20 20:37	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 On Site

Job ID: 240-126152-1

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	02-23-20 *
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
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	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20 *
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
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.

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190

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Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TestAmerica Laboratories, Inc.

Client Contact	Client Project Manager: Kris Hinskey	Site Contact: Julia McClafferty	Lab Contact: Mike DelMonico	COC No:
Company Name: Arcadis				
Address: 28550 Cabot Drive, Suite 500	Telephone: 248-994-2240	Telephone: 734-644-5131	Telephone: 330-497-9396	/ of / COCs
City/State/Zip: Novi, MI, 48377	Email: kristoffer.hinskey@arcadis.com	Analysis Turnaround Time	Analyses	For lab use only
Phone: 248-994-2240	Sampler Name: Gary Schafer	TAT if different from below: 10 day; ☐ 3 weeks ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Walk-in client
Project Name: Ford LTP On-Site	Method of Shipment/Carrier:			Lab sampling
Project Number: 30042006.0401.02	Shipping/Tracking No:			Job/SDG No:
PO # 30042006.0401.02				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	Zn Ac/ NaOH	Unpres	Other:	Filtered Sample (Y / N)	Composite=C / Grab=G	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	Sample Specific Notes / Special Instructions:
TRIP BLANK	2/10/20																							1 VOA
MW-194_021020	2/10/20	10:26		6						6							X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260BSIM
MW-1945_021020	2/10/20	11:21		6						6							X	X	X	X	X	X	X	
MW-1955_021020	2/10/20	12:36		6						6							X	X	X	X	X	X	X	
MW-66_021020	2/10/20	14:40		6						6							X	X	X	X	X	X	X	
MW-22_021020	2/10/20	16:21		6						6							X	X	X	X	X	X	X	
DUP-13	2/10/20	—		6						6							X	X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260BSIM

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return to ... ☐ Archive for ... months

Special Instructions/QC Requirements & Comments:

Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
Level IV Reporting requested.

240-126152 Chain of Custody

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Arcadis	2/10/20 16:55	Arcadis Trailer	Arcadis	2/10/20 16:56
Relinquished by: Arcadis Trailer	Company: Arcadis	Date/Time: 2/10/20 1710	Received by: Heather Woodrum	Company: Arcadis	Date/Time: 2/10/20 1710
Relinquished by: Heather Woodrum	Company: Arcadis	Date/Time: 2/10/20 1830	Received in Laboratory by: Arcadis Cold Storage	Company: Arcadis	Date/Time: 2/10/20 1830

Julia McClafferty JM Dan

Arcadis ETA 2/11/20 1100

2/11/20 12W JM Dan

ETA 2/11/20 1100

TA 2-12-20 810

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 126152

Client Arcadis Site Name _____

Cooler Received on 2-12-20 Opened on 2-12-20

Cooler unpacked by:

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-10 (CF +0.7 °C) Observed Cooler Temp. 2.7 °C Corrected Cooler Temp. 3.4 °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 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# HC995364
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 # _____	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: AG

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: _____