

ANALYTICAL REPORT

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

Laboratory Job ID: 240-139968-1
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:
11/25/2020 8:54:35 AM

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	16
QC Sample Results	17
QC Association Summary	21
Lab Chronicle	22
Certification Summary	24
Chain of Custody	25

Definitions/Glossary

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

Job ID: 240-139968-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 240-139968-1

Job ID: 240-139968-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP - On Site

Report Number: 240-139968-1

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 11/11/2020 9:15 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.8° C and 2.9° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TRIP BLANK (240-139968-1), MW-224S_110920 (240-139968-2), MW-25_110920 (240-139968-3), MW-01_110920 (240-139968-4), TW-16-03_110920 (240-139968-5), TW-16-01_110920 (240-139968-6) and PW-16-01_110920 (240-139968-7) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/20/2020 and 11/21/2020.

Samples TW-16-03_110920 (240-139968-5)[2.5X] and TW-16-01_110920 (240-139968-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The MS/MSD for batch 462021 was not reported because the parent sample needed a different dilution: TRIP BLANK (240-139968-1), MW-224S_110920 (240-139968-2), MW-25_110920 (240-139968-3), MW-01_110920 (240-139968-4), TW-16-03_110920 (240-139968-5) and TW-16-01_110920 (240-139968-6).

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

VOLATILE ORGANIC COMPOUNDS (GCMS SIM)

Case Narrative

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

Job ID: 240-139968-1

Job ID: 240-139968-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

Samples MW-224S_110920 (240-139968-2), MW-25_110920 (240-139968-3), MW-01_110920 (240-139968-4), TW-16-03_110920 (240-139968-5), TW-16-01_110920 (240-139968-6) and PW-16-01_110920 (240-139968-7) were analyzed for volatile organic compounds (GCMS SIM) in accordance with EPA SW-846 Method 8260B SIM. The samples were analyzed on 11/18/2020 and 11/19/2020.

1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for MW-01_110920 (240-139968-4). Refer to the QC report for details.

Surrogate recovery for the following sample was outside the upper control limit: MW-01_110920 (240-139968-4). 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.



Method Summary

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

Job ID: 240-139968-1

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: 240-139968-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-139968-1	TRIP BLANK	Water	11/09/20 00:00	11/11/20 09:15	
240-139968-2	MW-224S_110920	Water	11/09/20 09:22	11/11/20 09:15	
240-139968-3	MW-25_110920	Water	11/09/20 10:20	11/11/20 09:15	
240-139968-4	MW-01_110920	Water	11/09/20 11:43	11/11/20 09:15	
240-139968-5	TW-16-03_110920	Water	11/09/20 12:46	11/11/20 09:15	
240-139968-6	TW-16-01_110920	Water	11/09/20 13:58	11/11/20 09:15	
240-139968-7	PW-16-01_110920	Water	11/09/20 14:55	11/11/20 09:15	

Detection Summary

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

Job ID: 240-139968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-139968-1

No Detections.

Client Sample ID: MW-224S_110920

Lab Sample ID: 240-139968-2

No Detections.

Client Sample ID: MW-25_110920

Lab Sample ID: 240-139968-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	5.9		2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MW-01_110920

Lab Sample ID: 240-139968-4

No Detections.

Client Sample ID: TW-16-03_110920

Lab Sample ID: 240-139968-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	41		2.5	0.40	ug/L	2.5		8260B	Total/NA
Vinyl chloride	89		2.5	0.50	ug/L	2.5		8260B	Total/NA

Client Sample ID: TW-16-01_110920

Lab Sample ID: 240-139968-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	91		10	1.6	ug/L	10		8260B	Total/NA
Vinyl chloride	300		10	2.0	ug/L	10		8260B	Total/NA

Client Sample ID: PW-16-01_110920

Lab Sample ID: 240-139968-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.1		1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	35		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 - On Site

Job ID: 240-139968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-139968-1

Date Collected: 11/09/20 00:00

Matrix: Water

Date Received: 11/11/20 09:15

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			11/20/20 14:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/20/20 14:44	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/20/20 14:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/20/20 14:44	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/20/20 14:44	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/20/20 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 130		11/20/20 14:44	1
4-Bromofluorobenzene (Surr)	100		47 - 134		11/20/20 14:44	1
Toluene-d8 (Surr)	100		69 - 122		11/20/20 14:44	1
Dibromofluoromethane (Surr)	91		78 - 129		11/20/20 14:44	1

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: MW-224S_110920

Lab Sample ID: 240-139968-2

Date Collected: 11/09/20 09:22

Matrix: Water

Date Received: 11/11/20 09:15

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			11/18/20 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		70 - 133		11/18/20 17:03	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			11/20/20 15:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/20/20 15:08	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/20/20 15:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/20/20 15:08	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/20/20 15:08	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/20/20 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 130		11/20/20 15:08	1
4-Bromofluorobenzene (Surr)	103		47 - 134		11/20/20 15:08	1
Toluene-d8 (Surr)	101		69 - 122		11/20/20 15:08	1
Dibromofluoromethane (Surr)	93		78 - 129		11/20/20 15:08	1

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: MW-25_110920

Lab Sample ID: 240-139968-3

Date Collected: 11/09/20 10:20

Matrix: Water

Date Received: 11/11/20 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	5.9		2.0	0.86	ug/L			11/19/20 14:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	123		70 - 133		11/19/20 14:24	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			11/20/20 15:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/20/20 15:33	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/20/20 15:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/20/20 15:33	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/20/20 15:33	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/20/20 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 130		11/20/20 15:33	1
4-Bromofluorobenzene (Surr)	100		47 - 134		11/20/20 15:33	1
Toluene-d8 (Surr)	98		69 - 122		11/20/20 15:33	1
Dibromofluoromethane (Surr)	95		78 - 129		11/20/20 15:33	1

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: MW-01_110920

Lab Sample ID: 240-139968-4

Date Collected: 11/09/20 11:43

Matrix: Water

Date Received: 11/11/20 09:15

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			11/18/20 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	138	X	70 - 133		11/18/20 17:52	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			11/20/20 15:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/20/20 15:58	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/20/20 15:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/20/20 15:58	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/20/20 15:58	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/20/20 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 130		11/20/20 15:58	1
4-Bromofluorobenzene (Surr)	100		47 - 134		11/20/20 15:58	1
Toluene-d8 (Surr)	99		69 - 122		11/20/20 15:58	1
Dibromofluoromethane (Surr)	92		78 - 129		11/20/20 15:58	1

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: TW-16-03_110920

Lab Sample ID: 240-139968-5

Date Collected: 11/09/20 12:46

Matrix: Water

Date Received: 11/11/20 09:15

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			11/18/20 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		70 - 133		11/18/20 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.5	U	2.5	0.48	ug/L			11/20/20 16:23	2.5
cis-1,2-Dichloroethene	41		2.5	0.40	ug/L			11/20/20 16:23	2.5
Tetrachloroethene	2.5	U	2.5	0.38	ug/L			11/20/20 16:23	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.48	ug/L			11/20/20 16:23	2.5
Trichloroethene	2.5	U	2.5	0.25	ug/L			11/20/20 16:23	2.5
Vinyl chloride	89		2.5	0.50	ug/L			11/20/20 16:23	2.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 130		11/20/20 16:23	2.5
4-Bromofluorobenzene (Surr)	101		47 - 134		11/20/20 16:23	2.5
Toluene-d8 (Surr)	98		69 - 122		11/20/20 16:23	2.5
Dibromofluoromethane (Surr)	97		78 - 129		11/20/20 16:23	2.5

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: TW-16-01_110920

Lab Sample ID: 240-139968-6

Date Collected: 11/09/20 13:58

Matrix: Water

Date Received: 11/11/20 09:15

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			11/18/20 18:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	130		70 - 133		11/18/20 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	10	U	10	1.9	ug/L			11/20/20 16:48	10
cis-1,2-Dichloroethene	91		10	1.6	ug/L			11/20/20 16:48	10
Tetrachloroethene	10	U	10	1.5	ug/L			11/20/20 16:48	10
trans-1,2-Dichloroethene	10	U	10	1.9	ug/L			11/20/20 16:48	10
Trichloroethene	10	U	10	1.0	ug/L			11/20/20 16:48	10
Vinyl chloride	300		10	2.0	ug/L			11/20/20 16:48	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 130		11/20/20 16:48	10
4-Bromofluorobenzene (Surr)	101		47 - 134		11/20/20 16:48	10
Toluene-d8 (Surr)	100		69 - 122		11/20/20 16:48	10
Dibromofluoromethane (Surr)	93		78 - 129		11/20/20 16:48	10

Client Sample Results

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

Job ID: 240-139968-1

Client Sample ID: PW-16-01_110920

Lab Sample ID: 240-139968-7

Date Collected: 11/09/20 14:55

Matrix: Water

Date Received: 11/11/20 09:15

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			11/18/20 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	130		70 - 133		11/18/20 19:05	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			11/21/20 12:29	1
cis-1,2-Dichloroethene	2.1		1.0	0.16	ug/L			11/21/20 12:29	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/21/20 12:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 12:29	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/21/20 12:29	1
Vinyl chloride	35		1.0	0.20	ug/L			11/21/20 12:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		75 - 130		11/21/20 12:29	1
4-Bromofluorobenzene (Surr)	102		47 - 134		11/21/20 12:29	1
Toluene-d8 (Surr)	99		69 - 122		11/21/20 12:29	1
Dibromofluoromethane (Surr)	90		78 - 129		11/21/20 12:29	1

Surrogate Summary

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

Job ID: 240-139968-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-139968-1	TRIP BLANK	113	100	100	91
240-139968-2	MW-224S_110920	114	103	101	93
240-139968-3	MW-25_110920	114	100	98	95
240-139968-4	MW-01_110920	114	100	99	92
240-139968-5	TW-16-03_110920	112	101	98	97
240-139968-6	TW-16-01_110920	113	101	100	93
240-139968-7	PW-16-01_110920	111	102	99	90
240-140141-C-3 MS	Matrix Spike	102	109	105	82
240-140141-C-3 MSD	Matrix Spike Duplicate	101	108	105	81
LCS 240-462021/5	Lab Control Sample	98	107	103	83
LCS 240-462197/5	Lab Control Sample	99	108	103	82
MB 240-462021/8	Method Blank	110	100	97	90
MB 240-462197/8	Method Blank	113	104	102	93

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		DCA (70-133)
240-139968-2	MW-224S_110920	129
240-139968-3	MW-25_110920	123
240-139968-4	MW-01_110920	138 X
240-139968-5	TW-16-03_110920	127
240-139968-6	TW-16-01_110920	130
240-139968-7	PW-16-01_110920	130
240-139972-C-2 MS	Matrix Spike	132
240-139972-C-2 MSD	Matrix Spike Duplicate	128
240-140106-C-3 MS	Matrix Spike	130
240-140106-C-3 MSD	Matrix Spike Duplicate	127
LCS 240-461632/4	Lab Control Sample	128
LCS 240-461848/4	Lab Control Sample	124
MB 240-461632/5	Method Blank	129
MB 240-461848/5	Method Blank	124

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-139968-1

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

Lab Sample ID: MB 240-462021/8
Matrix: Water
Analysis Batch: 462021

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			11/20/20 11:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/20/20 11:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/20/20 11:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/20/20 11:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/20/20 11:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/20/20 11:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		75 - 130		11/20/20 11:50	1
4-Bromofluorobenzene (Surr)	100		47 - 134		11/20/20 11:50	1
Toluene-d8 (Surr)	97		69 - 122		11/20/20 11:50	1
Dibromofluoromethane (Surr)	90		78 - 129		11/20/20 11:50	1

Lab Sample ID: LCS 240-462021/5
Matrix: Water
Analysis Batch: 462021

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	20.0	18.6		ug/L		93	73 - 129
cis-1,2-Dichloroethene	20.0	18.8		ug/L		94	75 - 124
Tetrachloroethene	20.0	17.7		ug/L		88	70 - 125
trans-1,2-Dichloroethene	20.0	18.6		ug/L		93	74 - 130
Trichloroethene	20.0	15.8		ug/L		79	71 - 121
Vinyl chloride	20.0	22.0		ug/L		110	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		75 - 130
4-Bromofluorobenzene (Surr)	107		47 - 134
Toluene-d8 (Surr)	103		69 - 122
Dibromofluoromethane (Surr)	83		78 - 129

Lab Sample ID: MB 240-462197/8
Matrix: Water
Analysis Batch: 462197

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			11/21/20 12:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			11/21/20 12:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			11/21/20 12:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			11/21/20 12:04	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			11/21/20 12:04	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			11/21/20 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 130		11/21/20 12:04	1
4-Bromofluorobenzene (Surr)	104		47 - 134		11/21/20 12:04	1
Toluene-d8 (Surr)	102		69 - 122		11/21/20 12:04	1

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-139968-1

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

Lab Sample ID: MB 240-462197/8
Matrix: Water
Analysis Batch: 462197

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	93		78 - 129		11/21/20 12:04	1

Lab Sample ID: LCS 240-462197/5
Matrix: Water
Analysis Batch: 462197

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

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1-Dichloroethene	20.0	18.2		ug/L		91	73 - 129
cis-1,2-Dichloroethene	20.0	19.1		ug/L		95	75 - 124
Tetrachloroethene	20.0	17.5		ug/L		88	70 - 125
trans-1,2-Dichloroethene	20.0	18.8		ug/L		94	74 - 130
Trichloroethene	20.0	16.3		ug/L		81	71 - 121
Vinyl chloride	20.0	20.4		ug/L		102	61 - 134

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	99		75 - 130
4-Bromofluorobenzene (Surr)	108		47 - 134
Toluene-d8 (Surr)	103		69 - 122
Dibromofluoromethane (Surr)	82		78 - 129

Lab Sample ID: 240-140141-C-3 MS
Matrix: Water
Analysis Batch: 462197

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
1,1-Dichloroethene	5000	U	100000	88500		ug/L		88	64 - 132
cis-1,2-Dichloroethene	2000	J	100000	93300		ug/L		91	68 - 121
Tetrachloroethene	5000	U	100000	78400		ug/L		78	52 - 129
Trichloroethene	200000		100000	264000		ug/L		59	56 - 124
Vinyl chloride	5000	U	100000	92700		ug/L		93	49 - 136

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	102		75 - 130
4-Bromofluorobenzene (Surr)	109		47 - 134
Toluene-d8 (Surr)	105		69 - 122
Dibromofluoromethane (Surr)	82		78 - 129

Lab Sample ID: 240-140141-C-3 MSD
Matrix: Water
Analysis Batch: 462197

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
				Result	Qualifier						
1,1-Dichloroethene	5000	U	100000	93300		ug/L		93	64 - 132	5	35
cis-1,2-Dichloroethene	2000	J	100000	101000		ug/L		99	68 - 121	8	35
Tetrachloroethene	5000	U	100000	85900		ug/L		86	52 - 129	9	35
Trichloroethene	200000		100000	277000		ug/L		73	56 - 124	5	35
Vinyl chloride	5000	U	100000	97100		ug/L		97	49 - 136	5	35

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-139968-1

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

Lab Sample ID: 240-140141-C-3 MSD
Matrix: Water
Analysis Batch: 462197

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		75 - 130
4-Bromofluorobenzene (Surr)	108		47 - 134
Toluene-d8 (Surr)	105		69 - 122
Dibromofluoromethane (Surr)	81		78 - 129

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

Lab Sample ID: MB 240-461632/5
Matrix: Water
Analysis Batch: 461632

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			11/18/20 14:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		70 - 133		11/18/20 14:12	1

Lab Sample ID: LCS 240-461632/4
Matrix: Water
Analysis Batch: 461632

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	10.5		ug/L		105	80 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	128		70 - 133

Lab Sample ID: 240-139972-C-2 MS
Matrix: Water
Analysis Batch: 461632

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	2.0	U	10.0	10.3		ug/L		103	46 - 170

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	132		70 - 133

Lab Sample ID: 240-139972-C-2 MSD
Matrix: Water
Analysis Batch: 461632

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	2.0	U	10.0	10.5		ug/L		105	46 - 170	1	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	128		70 - 133

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-139968-1

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

Lab Sample ID: MB 240-461848/5
Matrix: Water
Analysis Batch: 461848

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			11/19/20 13:34	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		70 - 133					11/19/20 13:34	1

Lab Sample ID: LCS 240-461848/4
Matrix: Water
Analysis Batch: 461848

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	10.4		ug/L		104	80 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	124		70 - 133				

Lab Sample ID: 240-140106-C-3 MS
Matrix: Water
Analysis Batch: 461848

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	2.0	U	10.0	10.6		ug/L		106	46 - 170
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	130		70 - 133						

Lab Sample ID: 240-140106-C-3 MSD
Matrix: Water
Analysis Batch: 461848

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	Limit
1,4-Dioxane	2.0	U	10.0	10.5		ug/L		105	46 - 170	1	26
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	127		70 - 133								

QC Association Summary

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

Job ID: 240-139968-1

GC/MS VOA

Analysis Batch: 461632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-139968-2	MW-224S_110920	Total/NA	Water	8260B SIM	
240-139968-4	MW-01_110920	Total/NA	Water	8260B SIM	
240-139968-5	TW-16-03_110920	Total/NA	Water	8260B SIM	
240-139968-6	TW-16-01_110920	Total/NA	Water	8260B SIM	
240-139968-7	PW-16-01_110920	Total/NA	Water	8260B SIM	
MB 240-461632/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-461632/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-139972-C-2 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-139972-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 461848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-139968-3	MW-25_110920	Total/NA	Water	8260B SIM	
MB 240-461848/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-461848/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-140106-C-3 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-140106-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 462021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-139968-1	TRIP BLANK	Total/NA	Water	8260B	
240-139968-2	MW-224S_110920	Total/NA	Water	8260B	
240-139968-3	MW-25_110920	Total/NA	Water	8260B	
240-139968-4	MW-01_110920	Total/NA	Water	8260B	
240-139968-5	TW-16-03_110920	Total/NA	Water	8260B	
240-139968-6	TW-16-01_110920	Total/NA	Water	8260B	
MB 240-462021/8	Method Blank	Total/NA	Water	8260B	
LCS 240-462021/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 462197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-139968-7	PW-16-01_110920	Total/NA	Water	8260B	
MB 240-462197/8	Method Blank	Total/NA	Water	8260B	
LCS 240-462197/5	Lab Control Sample	Total/NA	Water	8260B	
240-140141-C-3 MS	Matrix Spike	Total/NA	Water	8260B	
240-140141-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

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

Job ID: 240-139968-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-139968-1

Date Collected: 11/09/20 00:00

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462021	11/20/20 14:44	HMB	TAL CAN

Client Sample ID: MW-224S_110920

Lab Sample ID: 240-139968-2

Date Collected: 11/09/20 09:22

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462021	11/20/20 15:08	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461632	11/18/20 17:03	SAM	TAL CAN

Client Sample ID: MW-25_110920

Lab Sample ID: 240-139968-3

Date Collected: 11/09/20 10:20

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462021	11/20/20 15:33	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461848	11/19/20 14:24	SAM	TAL CAN

Client Sample ID: MW-01_110920

Lab Sample ID: 240-139968-4

Date Collected: 11/09/20 11:43

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	462021	11/20/20 15:58	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461632	11/18/20 17:52	SAM	TAL CAN

Client Sample ID: TW-16-03_110920

Lab Sample ID: 240-139968-5

Date Collected: 11/09/20 12:46

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	462021	11/20/20 16:23	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461632	11/18/20 18:16	SAM	TAL CAN

Client Sample ID: TW-16-01_110920

Lab Sample ID: 240-139968-6

Date Collected: 11/09/20 13:58

Matrix: Water

Date Received: 11/11/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	462021	11/20/20 16:48	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461632	11/18/20 18:41	SAM	TAL CAN

Lab Chronicle

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

Job ID: 240-139968-1

Client Sample ID: PW-16-01_110920

Lab Sample ID: 240-139968-7

Date Collected: 11/09/20 14:55

Matrix: Water

Date Received: 11/11/20 09:15

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	462197	11/21/20 12:29	HMB	TAL CAN
Total/NA	Analysis	8260B SIM		1	461632	11/18/20 19:05	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 - On Site

Job ID: 240-139968-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-21
Georgia	State	4062	02-23-21
Illinois	NELAP	004498	07-31-21
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-21
Kentucky (UST)	State	112225	02-23-21
Kentucky (WW)	State	KY98016	12-31-20
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	08-31-21
Texas	NELAP	T104704517-18-10	08-31-21
USDA	US Federal Programs	P330-18-00281	09-17-21
Virginia	NELAP	010101	09-14-21
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

Chain of Custody Record

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

MICHIGAN
190

TestAmerica Laboratories, Inc.
COC No:

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

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

Client Project Manager: Kris Himskey
Telephone: 248-994-2240

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

Sampler Name: **CHRISTINA WEAVER**
Method of Shipment/Carrier:
Shipping/Tracking No:

Analyses

1,4-DCE 8260B	X
1,1-DCE 8260B	X
Trans-1,2-DCE 8260B	X
PCE 8260B	X
TCE 8260B	X
Vinyl Chloride 8260B	X
1,4-Dioxane 8260B SIM	X

Filtered Sample (Y/N)

NG
NG
NG
NG
NG
NG
NG

Containers & Preservatives

H2SO4	
HNO3	1
HCl	
NaOH	
ZnAc	
NaOH	
Other:	

Matrix

Air	
Aqueous	1
Sediment	
Solid	
Other:	

Sample Date

11/9/20	1
11/9/20	6
11/9/20	6
11/9/20	6
11/9/20	6
11/9/20	6
11/9/20	6

Sample Identification

TRIP BLANK	---
MW-2245-110920	0922
MW-25-110920	1020
MW-01-110920	1143
TW-16-03-110920	1246
TW-16-01-110920	1358
PW-16-01-110920	1455

Sample Specific Notes / Special Instructions:

TRIP BLANK
13 Vials for 8260B
3 Vials for 8260B SIM

Sample Disposal (A fee may be charged)

Return to Client Unknown

Special Instructions/QC Requirements & Comments:

240-139968 Chain of Custody

Relinquished by: *Christina Weaver*

Relinquished by: *Jolia McClafferty*

Relinquished by: *Paul Carr*

Company: ARCADIS
Date/Time: 11/9/2020/1600

Company: Arcadis
Date/Time: 11/10/20 1440

Company: ETA
Date/Time: 11/10/20/1700

Received by: *NOVI COOL STORAGE*

Received by: *Paul Carr*

Received in Laboratory by: *ETC*

Company: ARCADIS

Company: Arcadis

Company: ETA

Date/Time: 11/9/2020/1600

Date/Time: 11/10/20 1440

Date/Time: 11/10/20/1700

240-139968 Chain of Custody

Relinquished by: *Christina Weaver*

Relinquished by: *Jolia McClafferty*

Relinquished by: *Paul Carr*

Company: ARCADIS
Date/Time: 11/9/2020/1600

Company: Arcadis
Date/Time: 11/10/20 1440

Company: ETA
Date/Time: 11/10/20/1700

Canton Facility
 Client Arcadis Site Name _____ Cooler unpacked by: _____
 Cooler Received on 11-11-20 Opened on 11-12-20
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ **Storage Location** _____

TestAmerica Cooler # 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-11 (CF +0.9 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN #IR-12 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)? Yes No
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
 If yes, Questions 13-17 have been checked at the originating laboratory.
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC907861**
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA MSJ
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # NA Yes No
17. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:

 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES additional next page Samples processed by: _____

19. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____
 VOA Sample Preservation - Date/Time VOAs Frozen: _____

