

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
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North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-160210-1
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:
12/3/2021 1:33:36 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

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

Job ID: 240-160210-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
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.
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: 240-160210-1

Job ID: 240-160210-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative 240-160210-1

Comments

No additional comments.

Receipt

The samples were received on 11/17/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3° C.

GC/MS VOA

Method 8260B SIM: Reanalysis of the following sample was performed outside of the analytical holding time in order to confirm a previous result: MW-113_111521 (240-160210-6).

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

VOA Prep

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

Method Summary

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

Job ID: 240-160210-1

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

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- 11
- 12
- 13
- 14

Sample Summary

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

Job ID: 240-160210-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-160210-1	TRIP BLANK_60	Water	11/15/21 00:00	11/17/21 08:00
240-160210-2	DUP-15	Water	11/15/21 00:00	11/17/21 08:00
240-160210-3	DUP-01	Water	11/15/21 00:00	11/17/21 08:00
240-160210-4	MW-67_111521	Water	11/15/21 10:40	11/17/21 08:00
240-160210-5	MW-19_111521	Water	11/15/21 12:20	11/17/21 08:00
240-160210-6	MW-113_111521	Water	11/15/21 14:15	11/17/21 08:00
240-160210-7	MW-33_111521	Water	11/15/21 15:52	11/17/21 08:00

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- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

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

Job ID: 240-160210-1

Client Sample ID: TRIP BLANK_60

Lab Sample ID: 240-160210-1

No Detections.

Client Sample ID: DUP-15

Lab Sample ID: 240-160210-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	310		4.0	1.7	ug/L	2		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.49	J	1.0	0.46	ug/L	1		8260B	Total/NA
Trichloroethene	1.0		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	1.0		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 240-160210-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.2		2.0	0.92	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.2	J	2.0	1.0	ug/L	2		8260B	Total/NA
Trichloroethene	64		2.0	0.88	ug/L	2		8260B	Total/NA

Client Sample ID: MW-67_111521

Lab Sample ID: 240-160210-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.8		2.5	1.2	ug/L	2.5		8260B	Total/NA
Trichloroethene	63		2.5	1.1	ug/L	2.5		8260B	Total/NA

Client Sample ID: MW-19_111521

Lab Sample ID: 240-160210-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	290		4.0	1.7	ug/L	2		8260B SIM	Total/NA
Trichloroethene	1.1		1.0	0.44	ug/L	1		8260B	Total/NA
Vinyl chloride	0.91	J	1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MW-113_111521

Lab Sample ID: 240-160210-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.3	J	2.0	0.86	ug/L	1		8260B SIM	Total/NA

Client Sample ID: MW-33_111521

Lab Sample ID: 240-160210-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Canton

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: TRIP BLANK_60

Lab Sample ID: 240-160210-1

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

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	0.49	ug/L			11/24/21 16:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 16:37	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 16:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 16:37	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 16:37	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		62 - 137		11/24/21 16:37	1
4-Bromofluorobenzene (Surr)	68		56 - 136		11/24/21 16:37	1
Toluene-d8 (Surr)	84		78 - 122		11/24/21 16:37	1
Dibromofluoromethane (Surr)	96		73 - 120		11/24/21 16:37	1

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: DUP-15

Lab Sample ID: 240-160210-2

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	310		4.0	1.7	ug/L			11/22/21 19:34	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		66 - 120					11/22/21 19:34	2

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	0.49	ug/L			11/24/21 16:58	1
cis-1,2-Dichloroethene	0.49	J	1.0	0.46	ug/L			11/24/21 16:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 16:58	1
Trichloroethene	1.0		1.0	0.44	ug/L			11/24/21 16:58	1
Vinyl chloride	1.0		1.0	0.45	ug/L			11/24/21 16:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	125		62 - 137					11/24/21 16:58	1
4-Bromofluorobenzene (Surr)	69		56 - 136					11/24/21 16:58	1
Toluene-d8 (Surr)	90		78 - 122					11/24/21 16:58	1
Dibromofluoromethane (Surr)	101		73 - 120					11/24/21 16:58	1

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: DUP-01

Lab Sample ID: 240-160210-3

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

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			11/20/21 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		66 - 120		11/20/21 00:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	2.0	U	2.0	0.98	ug/L			11/24/21 17:20	2
cis-1,2-Dichloroethene	5.2		2.0	0.92	ug/L			11/24/21 17:20	2
Tetrachloroethene	2.0	U	2.0	0.88	ug/L			11/24/21 17:20	2
trans-1,2-Dichloroethene	1.2	J	2.0	1.0	ug/L			11/24/21 17:20	2
Trichloroethene	64		2.0	0.88	ug/L			11/24/21 17:20	2
Vinyl chloride	2.0	U	2.0	0.90	ug/L			11/24/21 17:20	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		62 - 137		11/24/21 17:20	2
4-Bromofluorobenzene (Surr)	71		56 - 136		11/24/21 17:20	2
Toluene-d8 (Surr)	91		78 - 122		11/24/21 17:20	2
Dibromofluoromethane (Surr)	107		73 - 120		11/24/21 17:20	2

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: MW-67_111521

Lab Sample ID: 240-160210-4

Date Collected: 11/15/21 10:40

Matrix: Water

Date Received: 11/17/21 08:00

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			11/20/21 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		66 - 120		11/20/21 00:34	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	1.2	ug/L			11/24/21 17:42	2.5
cis-1,2-Dichloroethene	4.8		2.5	1.2	ug/L			11/24/21 17:42	2.5
Tetrachloroethene	2.5	U	2.5	1.1	ug/L			11/24/21 17:42	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	1.3	ug/L			11/24/21 17:42	2.5
Trichloroethene	63		2.5	1.1	ug/L			11/24/21 17:42	2.5
Vinyl chloride	2.5	U	2.5	1.1	ug/L			11/24/21 17:42	2.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		62 - 137		11/24/21 17:42	2.5
4-Bromofluorobenzene (Surr)	67		56 - 136		11/24/21 17:42	2.5
Toluene-d8 (Surr)	89		78 - 122		11/24/21 17:42	2.5
Dibromofluoromethane (Surr)	105		73 - 120		11/24/21 17:42	2.5

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: MW-19_111521

Lab Sample ID: 240-160210-5

Date Collected: 11/15/21 12:20

Matrix: Water

Date Received: 11/17/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	290		4.0	1.7	ug/L			11/22/21 19:59	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		66 - 120		11/22/21 19:59	2

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	0.49	ug/L			11/24/21 18:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 18:04	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 18:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 18:04	1
Trichloroethene	1.1		1.0	0.44	ug/L			11/24/21 18:04	1
Vinyl chloride	0.91	J	1.0	0.45	ug/L			11/24/21 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	124		62 - 137		11/24/21 18:04	1
4-Bromofluorobenzene (Surr)	67		56 - 136		11/24/21 18:04	1
Toluene-d8 (Surr)	89		78 - 122		11/24/21 18:04	1
Dibromofluoromethane (Surr)	101		73 - 120		11/24/21 18:04	1

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: MW-113_111521

Lab Sample ID: 240-160210-6

Date Collected: 11/15/21 14:15

Matrix: Water

Date Received: 11/17/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.3	J	2.0	0.86	ug/L			11/20/21 01:23	1
1,4-Dioxane	2.0	U H	2.0	0.86	ug/L			11/30/21 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		66 - 120					11/20/21 01:23	1
1,2-Dichloroethane-d4 (Surr)	100		66 - 120					11/30/21 20:24	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	0.49	ug/L			11/24/21 18:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 18:26	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 18:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 18:26	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 18:26	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 18:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	129		62 - 137					11/24/21 18:26	1
4-Bromofluorobenzene (Surr)	67		56 - 136					11/24/21 18:26	1
Toluene-d8 (Surr)	86		78 - 122					11/24/21 18:26	1
Dibromofluoromethane (Surr)	110		73 - 120					11/24/21 18:26	1

Client Sample Results

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

Job ID: 240-160210-1

Client Sample ID: MW-33_111521

Lab Sample ID: 240-160210-7

Date Collected: 11/15/21 15:52

Matrix: Water

Date Received: 11/17/21 08:00

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			11/20/21 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		66 - 120		11/20/21 01:48	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	0.49	ug/L			11/24/21 18:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 18:47	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 18:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 18:47	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 18:47	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		62 - 137		11/24/21 18:47	1
4-Bromofluorobenzene (Surr)	67		56 - 136		11/24/21 18:47	1
Toluene-d8 (Surr)	86		78 - 122		11/24/21 18:47	1
Dibromofluoromethane (Surr)	105		73 - 120		11/24/21 18:47	1

Surrogate Summary

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

Job ID: 240-160210-1

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 (62-137)	BFB (56-136)	TOL (78-122)	DBFM (73-120)
240-159891-A-4 MS	Matrix Spike	100	96	100	91
240-159891-A-4 MSD	Matrix Spike Duplicate	99	93	97	82
240-160210-1	TRIP BLANK_60	128	68	84	96
240-160210-2	DUP-15	125	69	90	101
240-160210-3	DUP-01	124	71	91	107
240-160210-4	MW-67_111521	124	67	89	105
240-160210-5	MW-19_111521	124	67	89	101
240-160210-6	MW-113_111521	129	67	86	110
240-160210-7	MW-33_111521	127	67	86	105
LCS 240-514459/4	Lab Control Sample	98	96	100	82
MB 240-514459/7	Method Blank	118	74	88	94

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
		(66-120)
240-160210-2	DUP-15	78
240-160210-3	DUP-01	78
240-160210-4	MW-67_111521	79
240-160210-5	MW-19_111521	77
240-160210-6	MW-113_111521	78
240-160210-6	MW-113_111521	100
240-160210-7	MW-33_111521	77
240-160325-I-3 MS	Matrix Spike	80
240-160325-M-3 MSD	Matrix Spike Duplicate	75
240-160327-G-4 MS	Matrix Spike	75
240-160327-M-4 MSD	Matrix Spike Duplicate	74
240-160738-A-1 MS	Matrix Spike	103
240-160738-A-1 MSD	Matrix Spike Duplicate	103
LCS 240-513930/4	Lab Control Sample	74
LCS 240-514177/4	Lab Control Sample	77
LCS 240-515124/4	Lab Control Sample	101
MB 240-513930/5	Method Blank	76
MB 240-514177/5	Method Blank	77
MB 240-515124/5	Method Blank	103

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-160210-1

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

Lab Sample ID: MB 240-514459/7
Matrix: Water
Analysis Batch: 514459

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	1.0	U	1.0	0.49	ug/L			11/24/21 11:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 11:09	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 11:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 11:09	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 11:09	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 11:09	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	118		62 - 137		11/24/21 11:09	1
4-Bromofluorobenzene (Surr)	74		56 - 136		11/24/21 11:09	1
Toluene-d8 (Surr)	88		78 - 122		11/24/21 11:09	1
Dibromofluoromethane (Surr)	94		73 - 120		11/24/21 11:09	1

Lab Sample ID: LCS 240-514459/4
Matrix: Water
Analysis Batch: 514459

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	10.0	7.41		ug/L		74	63 - 134
cis-1,2-Dichloroethene	10.0	9.38		ug/L		94	77 - 123
Tetrachloroethene	10.0	8.84		ug/L		88	76 - 123
trans-1,2-Dichloroethene	10.0	9.77		ug/L		98	75 - 124
Trichloroethene	10.0	8.11		ug/L		81	70 - 122
Vinyl chloride	10.0	7.70		ug/L		77	60 - 144

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	100		78 - 122
Dibromofluoromethane (Surr)	82		73 - 120

Lab Sample ID: 240-159891-A-4 MS
Matrix: Water
Analysis Batch: 514459

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

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	33	U F1 F2	333	255		ug/L		77	56 - 135
cis-1,2-Dichloroethene	33	U F1 F2	333	321		ug/L		96	66 - 128
Tetrachloroethene	33	U F1 F2	333	250		ug/L		75	62 - 131
trans-1,2-Dichloroethene	33	U F2	333	338		ug/L		101	56 - 136
Trichloroethene	33	U F1 F2	333	265		ug/L		79	61 - 124
Vinyl chloride	33	U F2	333	285		ug/L		85	43 - 157

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		62 - 137
4-Bromofluorobenzene (Surr)	96		56 - 136
Toluene-d8 (Surr)	100		78 - 122

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-160210-1

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

Lab Sample ID: 240-159891-A-4 MS
Matrix: Water
Analysis Batch: 514459

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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	91		73 - 120

Lab Sample ID: 240-159891-A-4 MSD
Matrix: Water
Analysis Batch: 514459

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	33	U F1 F2	333	160	F1 F2	ug/L		48	56 - 135	46	26
cis-1,2-Dichloroethene	33	U F1 F2	333	193	F1 F2	ug/L		58	66 - 128	50	14
Tetrachloroethene	33	U F1 F2	333	195	F1 F2	ug/L		58	62 - 131	25	20
trans-1,2-Dichloroethene	33	U F2	333	207	F2	ug/L		62	56 - 136	48	15
Trichloroethene	33	U F1 F2	333	174	F1 F2	ug/L		52	61 - 124	41	15
Vinyl chloride	33	U F2	333	177	F2	ug/L		53	43 - 157	46	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		62 - 137
4-Bromofluorobenzene (Surr)	93		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	82		73 - 120

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

Lab Sample ID: MB 240-513930/5
Matrix: Water
Analysis Batch: 513930

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			11/19/21 18:46	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1,2-Dichloroethane-d4 (Surr)	76		66 - 120		11/19/21 18:46	1

Lab Sample ID: LCS 240-513930/4
Matrix: Water
Analysis Batch: 513930

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	10.6		ug/L		106	80 - 122

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	74		66 - 120

Lab Sample ID: 240-160325-I-3 MS
Matrix: Water
Analysis Batch: 513930

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	1.4	J F1	10.0	11.4		ug/L		101	51 - 153

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-160210-1

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

	<i>MS</i>	<i>MS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	80		66 - 120

Lab Sample ID: 240-160325-M-3 MSD
Matrix: Water
Analysis Batch: 513930

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,4-Dioxane	1.4	J F1	10.0	11.0		ug/L		96	51 - 153	4	16

	<i>MSD</i>	<i>MSD</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	75		66 - 120

Lab Sample ID: MB 240-514177/5
Matrix: Water
Analysis Batch: 514177

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

<i>Analyte</i>	<i>MB Result</i>	<i>MB Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			11/22/21 18:20	1

	<i>MB</i>	<i>MB</i>		<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			
1,2-Dichloroethane-d4 (Surr)	77		66 - 120		11/22/21 18:20	1

Lab Sample ID: LCS 240-514177/4
Matrix: Water
Analysis Batch: 514177

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

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,4-Dioxane	10.0	10.2		ug/L		102	80 - 122

	<i>LCS</i>	<i>LCS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	77		66 - 120

Lab Sample ID: 240-160327-G-4 MS
Matrix: Water
Analysis Batch: 514177

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
1,4-Dioxane	2.0	U	10.0	11.4		ug/L		114	51 - 153

	<i>MS</i>	<i>MS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	75		66 - 120

Lab Sample ID: 240-160327-M-4 MSD
Matrix: Water
Analysis Batch: 514177

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

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
1,4-Dioxane	2.0	U	10.0	10.9		ug/L		109	51 - 153	5	16

QC Sample Results

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

Job ID: 240-160210-1

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

Lab Sample ID: 240-160327-M-4 MSD
Matrix: Water
Analysis Batch: 514177

Client Sample ID: Matrix Spike Duplicate
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)	74		66 - 120

Lab Sample ID: MB 240-515124/5
Matrix: Water
Analysis Batch: 515124

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	-		11/30/21 19:13	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)	103		66 - 120		11/30/21 19:13	1

Lab Sample ID: LCS 240-515124/4
Matrix: Water
Analysis Batch: 515124

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	9.54		ug/L	-	95	80 - 122

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	101		66 - 120

Lab Sample ID: 240-160738-A-1 MS
Matrix: Water
Analysis Batch: 515124

Client Sample ID: Matrix Spike
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	32		10.0	42.6		ug/L	-	104	51 - 153

<u>Surrogate</u>	<u>MS</u> <u>%Recovery</u>	<u>MS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	103		66 - 120

Lab Sample ID: 240-160738-A-1 MSD
Matrix: Water
Analysis Batch: 515124

Client Sample ID: Matrix Spike Duplicate
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>Limit</u>
1,4-Dioxane	32		10.0	39.6		ug/L	-	74	51 - 153	7	16

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	103		66 - 120

QC Association Summary

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

Job ID: 240-160210-1

GC/MS VOA

Analysis Batch: 513930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160210-3	DUP-01	Total/NA	Water	8260B SIM	
240-160210-4	MW-67_111521	Total/NA	Water	8260B SIM	
240-160210-6	MW-113_111521	Total/NA	Water	8260B SIM	
240-160210-7	MW-33_111521	Total/NA	Water	8260B SIM	
MB 240-513930/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-513930/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-160325-I-3 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-160325-M-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 514177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160210-2	DUP-15	Total/NA	Water	8260B SIM	
240-160210-5	MW-19_111521	Total/NA	Water	8260B SIM	
MB 240-514177/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-514177/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-160327-G-4 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-160327-M-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 514459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160210-1	TRIP BLANK_60	Total/NA	Water	8260B	
240-160210-2	DUP-15	Total/NA	Water	8260B	
240-160210-3	DUP-01	Total/NA	Water	8260B	
240-160210-4	MW-67_111521	Total/NA	Water	8260B	
240-160210-5	MW-19_111521	Total/NA	Water	8260B	
240-160210-6	MW-113_111521	Total/NA	Water	8260B	
240-160210-7	MW-33_111521	Total/NA	Water	8260B	
MB 240-514459/7	Method Blank	Total/NA	Water	8260B	
LCS 240-514459/4	Lab Control Sample	Total/NA	Water	8260B	
240-159891-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
240-159891-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 515124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160210-6	MW-113_111521	Total/NA	Water	8260B SIM	
MB 240-515124/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-515124/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-160738-A-1 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-160738-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Lab Chronicle

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

Job ID: 240-160210-1

Client Sample ID: TRIP BLANK_60

Lab Sample ID: 240-160210-1

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514459	11/24/21 16:37	LEE	TAL CAN

Client Sample ID: DUP-15

Lab Sample ID: 240-160210-2

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514459	11/24/21 16:58	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		2	514177	11/22/21 19:34	CS	TAL CAN

Client Sample ID: DUP-01

Lab Sample ID: 240-160210-3

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	514459	11/24/21 17:20	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	513930	11/20/21 00:09	CS	TAL CAN

Client Sample ID: MW-67_111521

Lab Sample ID: 240-160210-4

Date Collected: 11/15/21 10:40

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	514459	11/24/21 17:42	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	513930	11/20/21 00:34	CS	TAL CAN

Client Sample ID: MW-19_111521

Lab Sample ID: 240-160210-5

Date Collected: 11/15/21 12:20

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514459	11/24/21 18:04	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		2	514177	11/22/21 19:59	CS	TAL CAN

Client Sample ID: MW-113_111521

Lab Sample ID: 240-160210-6

Date Collected: 11/15/21 14:15

Matrix: Water

Date Received: 11/17/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514459	11/24/21 18:26	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	513930	11/20/21 01:23	CS	TAL CAN
Total/NA	Analysis	8260B SIM		1	515124	11/30/21 20:24	CS	TAL CAN

Lab Chronicle

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

Job ID: 240-160210-1

Client Sample ID: MW-33_111521

Lab Sample ID: 240-160210-7

Date Collected: 11/15/21 15:52

Matrix: Water

Date Received: 11/17/21 08:00

<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	514459	11/24/21 18:47	LEE	TAL CAN
Total/NA	Analysis	8260B SIM		1	513930	11/20/21 01:48	CS	TAL CAN

Laboratory References:

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

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Accreditation/Certification Summary

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

Job ID: 240-160210-1

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	02-23-22
Connecticut	State	PH-0590	12-31-21
Florida	NELAP	E87225	06-30-22
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	07-31-22
Iowa	State	421	06-01-23
Kansas	NELAP	E-10336	04-30-22
Kentucky (UST)	State	112225	02-23-22
Kentucky (WW)	State	KY98016	12-31-21
Minnesota	NELAP	OH00048	12-31-21
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-22
New York	NELAP	10975	03-31-22
Ohio VAP	State	CL0024	12-21-23
Oregon	NELAP	4062	02-23-22
Pennsylvania	NELAP	68-00340	08-31-22
Texas	NELAP	T104704517-18-10	08-31-22
Virginia	NELAP	11570	09-14-22
Washington	State	C971	01-12-22
West Virginia DEP	State	210	12-31-21

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

Regulatory program: DW NPDES RCRA Other

Client Contact
Company Name: Arcadis
Address: 28550 Cabot Drive, Suite 500
City/State/Zip: Novi, MI, 48377
Phone: 248-994-2240

Client Project Manager: Kris Hinskey
Telephone: 248-994-2240
Site Contact: Julia McClafferty
Telephone: 734-644-5131

Project Name: Ford LTP On-Site
Project Number: 30080642-401.03
PO # 30080642-401.03

Sampler Name: Andrew Booth
Method of Shipment/Carrier:
Shipping/Tracking No:

Analysis Turnaround Time
TAT if different from below
10 day
 3 weeks
 2 weeks
 1 week
 2 days
 1 day

Containers & Preservatives
Matrix: Air Sediment Solid Other:
H2SO4 HNO3 HCl NaOH ZnAc NaOH 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 Identification	Sample Date	Sample Time	Air	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH	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_60	----	----	X						1					N		X	X	X	X	X	X	1 Trip Blank	
DUP-15	11/15/21	~	X						6					N		X	X	X	X	X	X	3 VOAs for 8260B 3 VOAs for 8260B SIM	
DUP-01	11/15/21	-	X						6					N		X	X	X	X	X	X		
MW-67-111521	11/15/21	1040	X						6					N		X	X	X	X	X	X		
MW-19-111521	11/15/21	1220	X						6					N		X	X	X	X	X	X		
MW-113-111521	11/15/21	1415	X						6					N		X	X	X	X	X	X		
MW-33-111521	11/15/21	1552	X						6					N		X	X	X	X	X	X		

Possible Hazard Identification
 Non-Hazard Flammable Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained in
 Return to Client Disposal By Lab Archive

Special Instructions/QC Requirements & Comments:
Submit all results through Cadena at jtomalia@cadenaco.com. Cadena #E203728
Level IV Reporting requested.

Relinquished by: [Signature]
Relinquished by: [Signature]
Relinquished by: [Signature]

Company: Arcadis
Company: ARCADIS
Company: ETA

Date/Time: 11/15/21 1640
Date/Time: 11/16/21 1043
Date/Time: 11/16/21

Received by: [Signature]
Received by: [Signature]
Received in Laboratory by: [Signature]

Company: Arcadis
Company: ETA
Company: ETA

Date/Time: 11/15/21 1640
Date/Time: 11/16/21 1043
Date/Time: 11/17/21 8:00



240-160210 Chain of Custody



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Eurofins TestAmerica Canton Sample Receipt Form/Narrative Login # : 60210


Canton Facility

Client Aradis Site Name _____ Cooler unpacked by: _____
Cooler Received on 11/17/21 Opened on 11/17/21 Trent

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

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

TestAmerica Cooler # 781 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 _____

- Cooler temperature upon receipt See Multiple Cooler Form
IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp. 0.2 °C Corrected Cooler Temp. 0.3 °C
IR GUN #IR-15 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
- 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
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
- For each sample, does the COC specify preservatives Y/N, # of containers Y/N, and sample type of grab/comp Y/N?
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- 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.
- Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC157842
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes  Larger than this. Yes No NA
- Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0104209 Yes No
- 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: _____

No SIM on TB per Corrected COC. IME 11/17/21

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: _____