

ANALYTICAL REPORT

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

Laboratory Job ID: 240-160327-1
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 9:40:03 AM

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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: 240-160327-1

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.
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: 240-160327-1

Job ID: 240-160327-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-160327-1

Comments

No additional comments.

Receipt

The samples were received on 11/18/2021 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

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

VOA Prep

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

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Method Summary

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

Job ID: 240-160327-1

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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- 13
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Sample Summary

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

Job ID: 240-160327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-160327-1	TRIP BLANK_131	Water	11/15/21 00:00	11/18/21 08:00
240-160327-2	MW-197S_111521	Water	11/15/21 10:15	11/18/21 08:00
240-160327-3	MW-64_111521	Water	11/15/21 12:20	11/18/21 08:00
240-160327-4	MW-63_111521	Water	11/15/21 13:55	11/18/21 08:00

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- 10
- 11
- 12
- 13
- 14

Detection Summary

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

Job ID: 240-160327-1

Client Sample ID: TRIP BLANK_131

Lab Sample ID: 240-160327-1

No Detections.

Client Sample ID: MW-197S_111521

Lab Sample ID: 240-160327-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	26		5.0	2.3	ug/L	5		8260B	Total/NA
Trichloroethene	85		5.0	2.2	ug/L	5		8260B	Total/NA
Vinyl chloride	3.1	J	5.0	2.3	ug/L	5		8260B	Total/NA

Client Sample ID: MW-64_111521

Lab Sample ID: 240-160327-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.52	J	1.0	0.46	ug/L	1		8260B	Total/NA
Vinyl chloride	4.6		1.0	0.45	ug/L	1		8260B	Total/NA

Client Sample ID: MW-63_111521

Lab Sample ID: 240-160327-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 240-160327-1

Client Sample ID: TRIP BLANK_131

Lab Sample ID: 240-160327-1

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/18/21 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 21:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 21:34	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 21:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 21:34	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 21:34	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		62 - 137		11/24/21 21:34	1
4-Bromofluorobenzene (Surr)	95		56 - 136		11/24/21 21:34	1
Toluene-d8 (Surr)	98		78 - 122		11/24/21 21:34	1
Dibromofluoromethane (Surr)	107		73 - 120		11/24/21 21:34	1

Client Sample Results

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

Job ID: 240-160327-1

Client Sample ID: MW-197S_111521

Lab Sample ID: 240-160327-2

Date Collected: 11/15/21 10:15

Matrix: Water

Date Received: 11/18/21 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			11/22/21 20:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		66 - 120					11/22/21 20:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	5.0	U	5.0	2.5	ug/L			11/24/21 23:33	5
cis-1,2-Dichloroethene	26		5.0	2.3	ug/L			11/24/21 23:33	5
Tetrachloroethene	5.0	U	5.0	2.2	ug/L			11/24/21 23:33	5
trans-1,2-Dichloroethene	5.0	U	5.0	2.6	ug/L			11/24/21 23:33	5
Trichloroethene	85		5.0	2.2	ug/L			11/24/21 23:33	5
Vinyl chloride	3.1	J	5.0	2.3	ug/L			11/24/21 23:33	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		62 - 137					11/24/21 23:33	5
4-Bromofluorobenzene (Surr)	95		56 - 136					11/24/21 23:33	5
Toluene-d8 (Surr)	98		78 - 122					11/24/21 23:33	5
Dibromofluoromethane (Surr)	111		73 - 120					11/24/21 23:33	5

Client Sample Results

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

Job ID: 240-160327-1

Client Sample ID: MW-64_111521

Lab Sample ID: 240-160327-3

Date Collected: 11/15/21 12:20

Matrix: Water

Date Received: 11/18/21 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			11/22/21 20:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		66 - 120					11/22/21 20:48	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 21:58	1
cis-1,2-Dichloroethene	0.52	J	1.0	0.46	ug/L			11/24/21 21:58	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 21:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 21:58	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 21:58	1
Vinyl chloride	4.6		1.0	0.45	ug/L			11/24/21 21:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		62 - 137					11/24/21 21:58	1
4-Bromofluorobenzene (Surr)	96		56 - 136					11/24/21 21:58	1
Toluene-d8 (Surr)	100		78 - 122					11/24/21 21:58	1
Dibromofluoromethane (Surr)	112		73 - 120					11/24/21 21:58	1

Client Sample Results

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

Job ID: 240-160327-1

Client Sample ID: MW-63_111521

Lab Sample ID: 240-160327-4

Date Collected: 11/15/21 13:55

Matrix: Water

Date Received: 11/18/21 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			11/22/21 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		66 - 120					11/22/21 21:13	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 22:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 22:22	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 22:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 22:22	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 22:22	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 22:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		62 - 137					11/24/21 22:22	1
4-Bromofluorobenzene (Surr)	93		56 - 136					11/24/21 22:22	1
Toluene-d8 (Surr)	96		78 - 122					11/24/21 22:22	1
Dibromofluoromethane (Surr)	111		73 - 120					11/24/21 22:22	1

Surrogate Summary

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

Job ID: 240-160327-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA	BFB	TOL	DBFM
		(62-137)	(56-136)	(78-122)	(73-120)
240-160327-1	TRIP BLANK_131	104	95	98	107
240-160327-2	MW-197S_111521	105	95	98	111
240-160327-3	MW-64_111521	106	96	100	112
240-160327-4	MW-63_111521	109	93	96	111
240-160327-4 MS	MW-63-MS_111521	97	94	98	105
240-160327-4 MSD	MW-63-MSD_111521	96	91	97	104
LCS 240-514539/5	Lab Control Sample	98	100	107	107
MB 240-514539/8	Method Blank	99	95	104	112

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)
240-160327-2	MW-197S_111521	76
240-160327-3	MW-64_111521	77
240-160327-4	MW-63_111521	76
240-160327-4 MS	MW-63-MS_111521	75
240-160327-4 MSD	MW-63-MSD_111521	74
LCS 240-514177/4	Lab Control Sample	77
MB 240-514177/5	Method Blank	77

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-160327-1

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

Lab Sample ID: MB 240-514539/8
Matrix: Water
Analysis Batch: 514539

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	0.49	ug/L			11/24/21 15:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.46	ug/L			11/24/21 15:16	1
Tetrachloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 15:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.51	ug/L			11/24/21 15:16	1
Trichloroethene	1.0	U	1.0	0.44	ug/L			11/24/21 15:16	1
Vinyl chloride	1.0	U	1.0	0.45	ug/L			11/24/21 15:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		62 - 137		11/24/21 15:16	1
4-Bromofluorobenzene (Surr)	95		56 - 136		11/24/21 15:16	1
Toluene-d8 (Surr)	104		78 - 122		11/24/21 15:16	1
Dibromofluoromethane (Surr)	112		73 - 120		11/24/21 15:16	1

Lab Sample ID: LCS 240-514539/5
Matrix: Water
Analysis Batch: 514539

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	25.0	27.8		ug/L		111	63 - 134
cis-1,2-Dichloroethene	25.0	25.9		ug/L		103	77 - 123
Tetrachloroethene	25.0	29.9		ug/L		120	76 - 123
trans-1,2-Dichloroethene	25.0	27.0		ug/L		108	75 - 124
Trichloroethene	25.0	27.3		ug/L		109	70 - 122
Vinyl chloride	25.0	23.6		ug/L		94	60 - 144

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		62 - 137
4-Bromofluorobenzene (Surr)	100		56 - 136
Toluene-d8 (Surr)	107		78 - 122
Dibromofluoromethane (Surr)	107		73 - 120

Lab Sample ID: 240-160327-4 MS
Matrix: Water
Analysis Batch: 514539

Client Sample ID: MW-63-MS_111521
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	25.0	24.9		ug/L		100	56 - 135
cis-1,2-Dichloroethene	1.0	U	25.0	24.2		ug/L		97	66 - 128
Tetrachloroethene	1.0	U	25.0	25.8		ug/L		103	62 - 131
trans-1,2-Dichloroethene	1.0	U	25.0	24.0		ug/L		96	56 - 136
Trichloroethene	1.0	U	25.0	24.8		ug/L		99	61 - 124
Vinyl chloride	1.0	U	25.0	22.0		ug/L		88	43 - 157

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		62 - 137
4-Bromofluorobenzene (Surr)	94		56 - 136
Toluene-d8 (Surr)	98		78 - 122

QC Sample Results

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

Job ID: 240-160327-1

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

Lab Sample ID: 240-160327-4 MS
Matrix: Water
Analysis Batch: 514539

Client Sample ID: MW-63-MS_111521
Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	105		73 - 120

Lab Sample ID: 240-160327-4 MSD
Matrix: Water
Analysis Batch: 514539

Client Sample ID: MW-63-MSD_111521
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	25.0	26.7		ug/L		107	56 - 135	7	26
cis-1,2-Dichloroethene	1.0	U	25.0	25.0		ug/L		100	66 - 128	3	14
Tetrachloroethene	1.0	U	25.0	26.7		ug/L		107	62 - 131	3	20
trans-1,2-Dichloroethene	1.0	U	25.0	25.4		ug/L		102	56 - 136	6	15
Trichloroethene	1.0	U	25.0	25.9		ug/L		104	61 - 124	5	15
Vinyl chloride	1.0	U	25.0	22.9		ug/L		91	43 - 157	4	24

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		62 - 137
4-Bromofluorobenzene (Surr)	91		56 - 136
Toluene-d8 (Surr)	97		78 - 122
Dibromofluoromethane (Surr)	104		73 - 120

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

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

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			11/22/21 18:20	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
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

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

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

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

Client Sample ID: MW-63-MS_111521
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	11.4		ug/L		114	51 - 153

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QC Sample Results

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

Job ID: 240-160327-1

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

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

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

Client Sample ID: MW-63-MSD_111521
 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	10.9		ug/L		109	51 - 153	5	16

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	74		66 - 120



QC Association Summary

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

Job ID: 240-160327-1

GC/MS VOA

Analysis Batch: 514177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160327-2	MW-197S_111521	Total/NA	Water	8260B SIM	
240-160327-3	MW-64_111521	Total/NA	Water	8260B SIM	
240-160327-4	MW-63_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	
240-160327-4 MS	MW-63-MS_111521	Total/NA	Water	8260B SIM	
240-160327-4 MSD	MW-63-MSD_111521	Total/NA	Water	8260B SIM	

Analysis Batch: 514539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-160327-1	TRIP BLANK_131	Total/NA	Water	8260B	
240-160327-2	MW-197S_111521	Total/NA	Water	8260B	
240-160327-3	MW-64_111521	Total/NA	Water	8260B	
240-160327-4	MW-63_111521	Total/NA	Water	8260B	
MB 240-514539/8	Method Blank	Total/NA	Water	8260B	
LCS 240-514539/5	Lab Control Sample	Total/NA	Water	8260B	
240-160327-4 MS	MW-63-MS_111521	Total/NA	Water	8260B	
240-160327-4 MSD	MW-63-MSD_111521	Total/NA	Water	8260B	

Lab Chronicle

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

Job ID: 240-160327-1

Client Sample ID: TRIP BLANK_131

Lab Sample ID: 240-160327-1

Date Collected: 11/15/21 00:00

Matrix: Water

Date Received: 11/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514539	11/24/21 21:34	SAM	TAL CAN

Client Sample ID: MW-197S_111521

Lab Sample ID: 240-160327-2

Date Collected: 11/15/21 10:15

Matrix: Water

Date Received: 11/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	514539	11/24/21 23:33	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	514177	11/22/21 20:24	CS	TAL CAN

Client Sample ID: MW-64_111521

Lab Sample ID: 240-160327-3

Date Collected: 11/15/21 12:20

Matrix: Water

Date Received: 11/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514539	11/24/21 21:58	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	514177	11/22/21 20:48	CS	TAL CAN

Client Sample ID: MW-63_111521

Lab Sample ID: 240-160327-4

Date Collected: 11/15/21 13:55

Matrix: Water

Date Received: 11/18/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	514539	11/24/21 22:22	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	514177	11/22/21 21:13	CS	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: 240-160327-1

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 Citation Drive, Suite 200 / Brighton, MI 48116 / 810-229-2763

Regulatory program: DW NPDES RCRA Other

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

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

Sampler Name: ALYSON HORTA
Method of Shipment/Carrier:
Shipping/Tracking No:

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

Containers & Preservatives
Matrix: Aqueous, Solid, Other
H2SO4, HNO3, HCl, NaOH, 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
TRIP BLANK_131
MW-1975-111521
MW-04-111521
MW-03-111521
MW-03-MS-111521
MW-03-MSD-111521

Sample Specific Notes / Special Instructions:
1 Trip Blank
3 VOAs for 8260B
3 VOAs for 8260B SIM
runMS/MSD

Barcode: 240-160327 Chain of Custody

Possible Hazard Identification
 Non-Hazard Irritant Inflammable Unknown

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

Relinquished by: [Signatures]
Date/Time: 11/15/21 15:45
Company: Arcadis

Received by: NAVI Cold Storage
Date/Time: 11/17/21 10:21
Company: Arcadis

Received in Laboratory by: [Signature]
Date/Time: 11/17/21
Company: ETA

Company: Arcadis
Date/Time: 11/15/21 15:45
Company: Arcadis
Date/Time: 11/17/21 15:45
Company: ETA
Date/Time: 11-18-21 0800



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Eurofins TestAmerica Canton Sample Receipt Form/Narrative

Login # : 100307

Canton Facility

Client Arcadis Site Name

Cooler unpacked by:

Cooler Received on 11-18-21 Opened on 11-18-21

Brandon

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

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

TestAmerica Cooler # FA 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 IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp. 0.2 °C Corrected Cooler Temp. 0.3 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No

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)?

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# HC157842

14. Were VOAs on the COC? Yes No

15. Were air bubbles >6 mm in any VOA vials? Larger than this. Yes No NA

16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No

17. Was a LL Hg or Me Hg trip blank present? Yes No

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

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: