

ANALYTICAL REPORT

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

Laboratory Job ID: 240-145164-1
Client Project/Site: Ford LTP - Off Site

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

Attn: Kristoffer Hinskey



Authorized for release by:
3/24/2021 2:46:39 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 - Off Site

Job ID: 240-145164-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

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

Job ID: 240-145164-1

Job ID: 240-145164-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-145164-1

Comments

No additional comments.

Receipt

The samples were received on 3/2/2021 9:15 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 2.1° 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 - Off Site

Job ID: 240-145164-1

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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Sample Summary

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

Job ID: 240-145164-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-145164-1	TRIP BLANK	Water	02/26/21 00:00	03/02/21 09:15	
240-145164-2	MW-132S_022621	Water	02/26/21 13:24	03/02/21 09:15	
240-145164-3	MW-131S_022621	Water	02/26/21 16:03	03/02/21 09:15	

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Detection Summary

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

Job ID: 240-145164-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-145164-1

No Detections.

Client Sample ID: MW-132S_022621

Lab Sample ID: 240-145164-2

No Detections.

Client Sample ID: MW-131S_022621

Lab Sample ID: 240-145164-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	1.1		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 - Off Site

Job ID: 240-145164-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-145164-1

Date Collected: 02/26/21 00:00

Matrix: Water

Date Received: 03/02/21 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			03/04/21 21:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/04/21 21:28	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/04/21 21:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/04/21 21:28	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/04/21 21:28	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/04/21 21:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		75 - 130		03/04/21 21:28	1
4-Bromofluorobenzene (Surr)	57		47 - 134		03/04/21 21:28	1
Toluene-d8 (Surr)	69		69 - 122		03/04/21 21:28	1
Dibromofluoromethane (Surr)	115		78 - 129		03/04/21 21:28	1

Client Sample Results

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

Job ID: 240-145164-1

Client Sample ID: MW-132S_022621

Lab Sample ID: 240-145164-2

Date Collected: 02/26/21 13:24

Matrix: Water

Date Received: 03/02/21 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			03/04/21 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 133		03/04/21 19:21	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			03/04/21 21:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/04/21 21:52	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/04/21 21:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/04/21 21:52	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/04/21 21:52	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/04/21 21:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 130		03/04/21 21:52	1
4-Bromofluorobenzene (Surr)	69		47 - 134		03/04/21 21:52	1
Toluene-d8 (Surr)	85		69 - 122		03/04/21 21:52	1
Dibromofluoromethane (Surr)	124		78 - 129		03/04/21 21:52	1

Client Sample Results

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

Job ID: 240-145164-1

Client Sample ID: MW-131S_022621

Lab Sample ID: 240-145164-3

Date Collected: 02/26/21 16:03

Matrix: Water

Date Received: 03/02/21 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			03/04/21 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 133		03/04/21 20:38	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			03/04/21 23:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/04/21 23:04	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/04/21 23:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/04/21 23:04	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/04/21 23:04	1
Vinyl chloride	1.1		1.0	0.20	ug/L			03/04/21 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 130		03/04/21 23:04	1
4-Bromofluorobenzene (Surr)	68		47 - 134		03/04/21 23:04	1
Toluene-d8 (Surr)	95		69 - 122		03/04/21 23:04	1
Dibromofluoromethane (Surr)	105		78 - 129		03/04/21 23:04	1

Surrogate Summary

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

Job ID: 240-145164-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (75-130)	BFB (47-134)	TOL (69-122)	DBFM (78-129)
240-145164-1	TRIP BLANK	120	57	69	115
240-145164-2	MW-132S_022621	115	69	85	124
240-145164-2 MS	MW-132S-MS_022621	95	93	89	92
240-145164-2 MSD	MW-132S-MSD_022621	84	85	87	90
240-145164-3	MW-131S_022621	106	68	95	105
LCS 240-475466/4	Lab Control Sample	84	87	86	88
MB 240-475466/7	Method Blank	106	64	79	109

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DCA
		(70-133)
240-145164-2	MW-132S_022621	95
240-145164-2 MS	MW-132S-MS_022621	94
240-145164-2 MSD	MW-132S-MSD_022621	96
240-145164-3	MW-131S_022621	91
LCS 240-475458/4	Lab Control Sample	84
MB 240-475458/5	Method Blank	87

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-145164-1

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

Lab Sample ID: MB 240-475466/7
Matrix: Water
Analysis Batch: 475466

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	0.19	ug/L			03/04/21 16:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			03/04/21 16:39	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			03/04/21 16:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			03/04/21 16:39	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			03/04/21 16:39	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			03/04/21 16:39	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	106		75 - 130		03/04/21 16:39	1
4-Bromofluorobenzene (Surr)	64		47 - 134		03/04/21 16:39	1
Toluene-d8 (Surr)	79		69 - 122		03/04/21 16:39	1
Dibromofluoromethane (Surr)	109		78 - 129		03/04/21 16:39	1

Lab Sample ID: LCS 240-475466/4
Matrix: Water
Analysis Batch: 475466

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	11.0		ug/L		110	73 - 129
cis-1,2-Dichloroethene	10.0	9.51		ug/L		95	75 - 124
Tetrachloroethene	10.0	12.0		ug/L		120	70 - 125
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	74 - 130
Trichloroethene	10.0	9.56		ug/L		96	71 - 121
Vinyl chloride	10.0	10.8		ug/L		108	61 - 134

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	84		75 - 130
4-Bromofluorobenzene (Surr)	87		47 - 134
Toluene-d8 (Surr)	86		69 - 122
Dibromofluoromethane (Surr)	88		78 - 129

Lab Sample ID: 240-145164-2 MS
Matrix: Water
Analysis Batch: 475466

Client Sample ID: MW-132S-MS_022621
Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene	1.0	U	10.0	11.0		ug/L		110	64 - 132
cis-1,2-Dichloroethene	1.0	U	10.0	9.35		ug/L		93	68 - 121
Tetrachloroethene	1.0	U	10.0	12.4		ug/L		124	52 - 129
trans-1,2-Dichloroethene	1.0	U	10.0	10.6		ug/L		106	69 - 126
Trichloroethene	1.0	U	10.0	9.05		ug/L		90	56 - 124
Vinyl chloride	1.0	U	10.0	10.9		ug/L		109	49 - 136

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	95		75 - 130
4-Bromofluorobenzene (Surr)	93		47 - 134
Toluene-d8 (Surr)	89		69 - 122

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-145164-1

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

Lab Sample ID: 240-145164-2 MS
Matrix: Water
Analysis Batch: 475466

Client Sample ID: MW-132S-MS_022621
Prep Type: Total/NA

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Dibromofluoromethane (Surr)	92		78 - 129

Lab Sample ID: 240-145164-2 MSD
Matrix: Water
Analysis Batch: 475466

Client Sample ID: MW-132S-MSD_022621
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1,1-Dichloroethene	1.0	U	10.0	9.07		ug/L		91	64 - 132	19	35
cis-1,2-Dichloroethene	1.0	U	10.0	8.16		ug/L		82	68 - 121	14	35
Tetrachloroethene	1.0	U	10.0	10.4		ug/L		104	52 - 129	18	35
trans-1,2-Dichloroethene	1.0	U	10.0	8.75		ug/L		87	69 - 126	20	35
Trichloroethene	1.0	U	10.0	9.44		ug/L		94	56 - 124	4	35
Vinyl chloride	1.0	U	10.0	9.34		ug/L		93	49 - 136	15	35

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	84		75 - 130
4-Bromofluorobenzene (Surr)	85		47 - 134
Toluene-d8 (Surr)	87		69 - 122
Dibromofluoromethane (Surr)	90		78 - 129

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

Lab Sample ID: MB 240-475458/5
Matrix: Water
Analysis Batch: 475458

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dioxane	2.0	U	2.0	0.86	ug/L			03/04/21 11:50	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	87		70 - 133		03/04/21 11:50	1

Lab Sample ID: LCS 240-475458/4
Matrix: Water
Analysis Batch: 475458

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
1,4-Dioxane	10.0	8.91		ug/L		89	80 - 135

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	84		70 - 133

Lab Sample ID: 240-145164-2 MS
Matrix: Water
Analysis Batch: 475458

Client Sample ID: MW-132S-MS_022621
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
1,4-Dioxane	2.0	U	10.0	8.58		ug/L		86	46 - 170

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-145164-1

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

<u>Surrogate</u>	<u>MS</u> <u>%Recovery</u>	<u>MS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	94		70 - 133

Lab Sample ID: 240-145164-2 MSD
Matrix: Water
Analysis Batch: 475458

Client Sample ID: MW-132S-MSD_022621
Prep Type: Total/NA

<u>Analyte</u>	<u>Sample</u> <u>Result</u>	<u>Sample</u> <u>Qualifier</u>	<u>Spike</u> <u>Added</u>	<u>MSD</u> <u>Result</u>	<u>MSD</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec.</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>Limit</u>
1,4-Dioxane	2.0	U	10.0	8.65		ug/L		86	46 - 170	1	26

<u>Surrogate</u>	<u>MSD</u> <u>%Recovery</u>	<u>MSD</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dichloroethane-d4 (Surr)	96		70 - 133

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QC Association Summary

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

Job ID: 240-145164-1

GC/MS VOA

Analysis Batch: 475458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-145164-2	MW-132S_022621	Total/NA	Water	8260B SIM	
240-145164-3	MW-131S_022621	Total/NA	Water	8260B SIM	
MB 240-475458/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-475458/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-145164-2 MS	MW-132S-MS_022621	Total/NA	Water	8260B SIM	
240-145164-2 MSD	MW-132S-MSD_022621	Total/NA	Water	8260B SIM	

Analysis Batch: 475466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-145164-1	TRIP BLANK	Total/NA	Water	8260B	
240-145164-2	MW-132S_022621	Total/NA	Water	8260B	
240-145164-3	MW-131S_022621	Total/NA	Water	8260B	
MB 240-475466/7	Method Blank	Total/NA	Water	8260B	
LCS 240-475466/4	Lab Control Sample	Total/NA	Water	8260B	
240-145164-2 MS	MW-132S-MS_022621	Total/NA	Water	8260B	
240-145164-2 MSD	MW-132S-MSD_022621	Total/NA	Water	8260B	

Lab Chronicle

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

Job ID: 240-145164-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-145164-1

Date Collected: 02/26/21 00:00

Matrix: Water

Date Received: 03/02/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	475466	03/04/21 21:28	LRW	TAL CAN

Client Sample ID: MW-132S_022621

Lab Sample ID: 240-145164-2

Date Collected: 02/26/21 13:24

Matrix: Water

Date Received: 03/02/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	475466	03/04/21 21:52	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	475458	03/04/21 19:21	SAM	TAL CAN

Client Sample ID: MW-131S_022621

Lab Sample ID: 240-145164-3

Date Collected: 02/26/21 16:03

Matrix: Water

Date Received: 03/02/21 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	475466	03/04/21 23:04	LRW	TAL CAN
Total/NA	Analysis	8260B SIM		1	475458	03/04/21 20:38	SAM	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 - Off Site

Job ID: 240-145164-1

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	12-31-21
Minnesota	NELAP	OH00048	12-31-21
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	12-21-23
Oregon	NELAP	4062	02-23-22
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	01-12-22
West Virginia DEP	State	210	12-31-21

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



Chain of Custody Record

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



Regulatory program: DW NPDES RCRA Other

Client Project Manager: **Kris Hinskey** Site Contact: **Julia McClafferty** Lab Contact: **Mike DelMonico**

Telephone: 248-994-2240 Telephone: 734-644-5131 Telephone: 330-497-9396

Email: kristoffr.hinskey@arcadis.com

Sampler Name: *Kara Dube*

Method of Shipment/Carrier:

Shipping/Tracking No.:

Company Name: **Arcadis**

Address: 28550 Cabot Drive, Suite 500

City/State/Zip: Novi, MI, 48377

Phone: 248-994-2240

Project Name: Ford LTP Off-Site

Project Number: 30050315.402.04

PO # 30050315.402.04

Sample Identification	Sample Date	Sample Time	Matrix										Filtered Sample (Y / N)	Analyses					Sample Specific Notes / Special Instructions:			
			Air	Aqueous	Sediment	Solid	Others:	H2SO4	HNO3	HCl	NaOH	Zinc/Nickel		Uapres	Others:	1-DCE 8260B	cis-1,2-DCE 8260B	Trans-1,2-DCE 8260B		PCE 8260B	TCE 8260B	Vinyl Chloride 8260B
TRIP BLANK	---	---	X																		1 Trip Blank	
MW-132S-022621	2/20/21	1324																				3 VOAs for 8260B 3 VOAs for 8260B SIM
MW-132S-MS-022621	2/20/21	1324																				
MW-132S-MSD-022621	2/20/21	1324																				
MW-131S-022621	2/20/21	1003																				



Possible Hazard Identification: Non-Hazard Irritable in Irritant Poison B Unknown

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

Special Instructions/QC Requirements & Comments:

Relinquished by: *Kara Dube* Company: **Arcadis** Date/Time: 2/20/21 1730 Received by: *Novi Gold Storage* Company: **Arcadis**

Relinquished by: *RACHEL BIELEK* Company: **Arcadis** Date/Time: 3/1/21 1100 Received by: *Amanda Battershall* Company: **ETA**

Relinquished by: *Amanda Battershall* Company: **ETA** Date/Time: 3/1/21 1253 Received by: *[Signature]* Company: **ETA**

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Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 145164

Client Alcadi's Site Name _____

Cooler unpacked by:
Mattson

Cooler Received on 3-2-21 Opened on 3-2-21

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

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

TestAmerica Cooler # 177 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 +0.1 °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp. 2.1 °C
 IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
 -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# HC022887
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? Yes No NA
 Larger than this. ←
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0212801F 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: _____