

ANALYTICAL REPORT

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

Laboratory Job ID: 240-149328-1
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:
5/27/2021 11:13:21 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	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
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: 240-149328-1

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: 240-149328-1

Job ID: 240-149328-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-149328-1

Comments

No additional comments.

Receipt

The samples were received on 5/13/2021 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 3.2° C.

GC/MS VOA

Method 8260B SIM: The following volatiles samples was diluted due to foaming at the time of purging during the original sample analysis: MW-71_051121 (240-149328-2), MW-29_051121 (240-149328-5) and DUP-01 (240-149328-6). Elevated reporting limits (RLs) are provided.

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: 240-149328-1

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Sample Summary

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

Job ID: 240-149328-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-149328-1	TRIP BLANK_67	Water	05/11/21 00:00	05/13/21 08:00	
240-149328-2	MW-71_051121	Water	05/11/21 16:30	05/13/21 08:00	
240-149328-3	MW-70_051121	Water	05/11/21 15:00	05/13/21 08:00	
240-149328-4	MW-45_051121	Water	05/11/21 13:30	05/13/21 08:00	
240-149328-5	MW-29_051121	Water	05/11/21 12:00	05/13/21 08:00	
240-149328-6	DUP-01	Water	05/11/21 00:00	05/13/21 08:00	
240-149328-7	MW-05_051121	Water	05/11/21 10:15	05/13/21 08:00	
240-149328-8	MW-03_051121	Water	05/11/21 08:45	05/13/21 08:00	

Detection Summary

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

Job ID: 240-149328-1

Client Sample ID: TRIP BLANK_67

Lab Sample ID: 240-149328-1

No Detections.

Client Sample ID: MW-71_051121

Lab Sample ID: 240-149328-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.72	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	0.29	J	1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MW-70_051121

Lab Sample ID: 240-149328-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.7		2.0	0.86	ug/L	1		8260B SIM	Total/NA
cis-1,2-Dichloroethene	280		8.3	1.3	ug/L	8.333		8260B	Total/NA
Vinyl chloride	560		8.3	1.7	ug/L	8.333		8260B	Total/NA

Client Sample ID: MW-45_051121

Lab Sample ID: 240-149328-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	480		17	2.7	ug/L	16.667		8260B	Total/NA
Vinyl chloride	1200		17	3.3	ug/L	16.667		8260B	Total/NA

Client Sample ID: MW-29_051121

Lab Sample ID: 240-149328-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		4.0	1.7	ug/L	2		8260B SIM	Total/NA
Vinyl chloride	3.9		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 240-149328-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		4.0	1.7	ug/L	2		8260B SIM	Total/NA
cis-1,2-Dichloroethene	0.19	J	1.0	0.16	ug/L	1		8260B	Total/NA
Vinyl chloride	3.9		1.0	0.20	ug/L	1		8260B	Total/NA

Client Sample ID: MW-05_051121

Lab Sample ID: 240-149328-7

No Detections.

Client Sample ID: MW-03_051121

Lab Sample ID: 240-149328-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.8	J	2.0	0.86	ug/L	1		8260B SIM	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: 240-149328-1

Client Sample ID: TRIP BLANK_67

Lab Sample ID: 240-149328-1

Date Collected: 05/11/21 00:00

Matrix: Water

Date Received: 05/13/21 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	0.19	ug/L			05/20/21 17:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/21 17:09	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 17:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 17:09	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 17:09	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/20/21 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		75 - 130		05/20/21 17:09	1
4-Bromofluorobenzene (Surr)	96		47 - 134		05/20/21 17:09	1
Toluene-d8 (Surr)	109		69 - 122		05/20/21 17:09	1
Dibromofluoromethane (Surr)	108		78 - 129		05/20/21 17:09	1

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-71_051121

Lab Sample ID: 240-149328-2

Date Collected: 05/11/21 16:30

Matrix: Water

Date Received: 05/13/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	4.0	U	4.0	1.7	ug/L			05/18/21 21:07	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 133		05/18/21 21:07	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	0.19	ug/L			05/20/21 20:05	1
cis-1,2-Dichloroethene	0.72	J	1.0	0.16	ug/L			05/20/21 20:05	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 20:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 20:05	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 20:05	1
Vinyl chloride	0.29	J	1.0	0.20	ug/L			05/20/21 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 130		05/20/21 20:05	1
4-Bromofluorobenzene (Surr)	95		47 - 134		05/20/21 20:05	1
Toluene-d8 (Surr)	101		69 - 122		05/20/21 20:05	1
Dibromofluoromethane (Surr)	105		78 - 129		05/20/21 20:05	1

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-70_051121

Lab Sample ID: 240-149328-3

Date Collected: 05/11/21 15:00

Matrix: Water

Date Received: 05/13/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.7		2.0	0.86	ug/L			05/18/21 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 133		05/18/21 21:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	8.3	U	8.3	1.6	ug/L			05/20/21 20:30	8.333
cis-1,2-Dichloroethene	280		8.3	1.3	ug/L			05/20/21 20:30	8.333
Tetrachloroethene	8.3	U	8.3	1.2	ug/L			05/20/21 20:30	8.333
trans-1,2-Dichloroethene	8.3	U	8.3	1.6	ug/L			05/20/21 20:30	8.333
Trichloroethene	8.3	U	8.3	0.83	ug/L			05/20/21 20:30	8.333
Vinyl chloride	560		8.3	1.7	ug/L			05/20/21 20:30	8.333

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 130		05/20/21 20:30	8.333
4-Bromofluorobenzene (Surr)	93		47 - 134		05/20/21 20:30	8.333
Toluene-d8 (Surr)	102		69 - 122		05/20/21 20:30	8.333
Dibromofluoromethane (Surr)	109		78 - 129		05/20/21 20:30	8.333

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-45_051121

Lab Sample ID: 240-149328-4

Date Collected: 05/11/21 13:30

Matrix: Water

Date Received: 05/13/21 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			05/18/21 21:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 133					05/18/21 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	17	U	17	3.2	ug/L			05/20/21 20:56	16.667
cis-1,2-Dichloroethene	480		17	2.7	ug/L			05/20/21 20:56	16.667
Tetrachloroethene	17	U	17	2.5	ug/L			05/20/21 20:56	16.667
trans-1,2-Dichloroethene	17	U	17	3.2	ug/L			05/20/21 20:56	16.667
Trichloroethene	17	U	17	1.7	ug/L			05/20/21 20:56	16.667
Vinyl chloride	1200		17	3.3	ug/L			05/20/21 20:56	16.667
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130					05/20/21 20:56	16.667
4-Bromofluorobenzene (Surr)	95		47 - 134					05/20/21 20:56	16.667
Toluene-d8 (Surr)	106		69 - 122					05/20/21 20:56	16.667
Dibromofluoromethane (Surr)	101		78 - 129					05/20/21 20:56	16.667

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-29_051121

Lab Sample ID: 240-149328-5

Date Collected: 05/11/21 12:00

Matrix: Water

Date Received: 05/13/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		4.0	1.7	ug/L			05/18/21 22:21	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 133					05/18/21 22:21	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	0.19	ug/L			05/20/21 17:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/21 17:59	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 17:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 17:59	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 17:59	1
Vinyl chloride	3.9		1.0	0.20	ug/L			05/20/21 17:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130					05/20/21 17:59	1
4-Bromofluorobenzene (Surr)	95		47 - 134					05/20/21 17:59	1
Toluene-d8 (Surr)	103		69 - 122					05/20/21 17:59	1
Dibromofluoromethane (Surr)	106		78 - 129					05/20/21 17:59	1

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: DUP-01

Lab Sample ID: 240-149328-6

Date Collected: 05/11/21 00:00

Matrix: Water

Date Received: 05/13/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		4.0	1.7	ug/L			05/18/21 22:46	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 133					05/18/21 22:46	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	0.19	ug/L			05/21/21 15:57	1
cis-1,2-Dichloroethene	0.19	J	1.0	0.16	ug/L			05/21/21 15:57	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/21/21 15:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/21/21 15:57	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/21/21 15:57	1
Vinyl chloride	3.9		1.0	0.20	ug/L			05/21/21 15:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130					05/21/21 15:57	1
4-Bromofluorobenzene (Surr)	97		47 - 134					05/21/21 15:57	1
Toluene-d8 (Surr)	101		69 - 122					05/21/21 15:57	1
Dibromofluoromethane (Surr)	108		78 - 129					05/21/21 15:57	1

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-05_051121

Lab Sample ID: 240-149328-7

Date Collected: 05/11/21 10:15

Matrix: Water

Date Received: 05/13/21 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			05/18/21 23:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 133					05/18/21 23:11	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			05/20/21 18:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/21 18:24	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 18:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 18:24	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 18:24	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/20/21 18:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 130					05/20/21 18:24	1
4-Bromofluorobenzene (Surr)	93		47 - 134					05/20/21 18:24	1
Toluene-d8 (Surr)	101		69 - 122					05/20/21 18:24	1
Dibromofluoromethane (Surr)	105		78 - 129					05/20/21 18:24	1

Client Sample Results

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

Job ID: 240-149328-1

Client Sample ID: MW-03_051121

Lab Sample ID: 240-149328-8

Date Collected: 05/11/21 08:45

Matrix: Water

Date Received: 05/13/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.8	J	2.0	0.86	ug/L			05/18/21 23:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 133		05/18/21 23:36	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			05/20/21 18:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/21 18:50	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 18:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 18:50	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 18:50	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/20/21 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 130		05/20/21 18:50	1
4-Bromofluorobenzene (Surr)	98		47 - 134		05/20/21 18:50	1
Toluene-d8 (Surr)	105		69 - 122		05/20/21 18:50	1
Dibromofluoromethane (Surr)	108		78 - 129		05/20/21 18:50	1

Surrogate Summary

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

Job ID: 240-149328-1

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)
190-25914-B-1 MS	Matrix Spike	103	99	104	107
190-25914-B-1 MSD	Matrix Spike Duplicate	112	100	104	116
240-149328-1	TRIP BLANK_67	108	96	109	108
240-149328-2	MW-71_051121	102	95	101	105
240-149328-3	MW-70_051121	105	93	102	109
240-149328-4	MW-45_051121	104	95	106	101
240-149328-5	MW-29_051121	104	95	103	106
240-149328-6	DUP-01	104	97	101	108
240-149328-7	MW-05_051121	104	93	101	105
240-149328-8	MW-03_051121	103	98	105	108
240-149329-G-3 MS	Matrix Spike	103	103	104	104
240-149329-M-3 MSD	Matrix Spike Duplicate	107	106	109	110
LCS 240-486721/5	Lab Control Sample	106	102	107	115
LCS 240-486953/5	Lab Control Sample	106	103	103	113
MB 240-486721/7	Method Blank	109	98	106	111
MB 240-486953/7	Method Blank	106	94	102	103

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)
240-149328-2	MW-71_051121	97
240-149328-3	MW-70_051121	97
240-149328-4	MW-45_051121	95
240-149328-5	MW-29_051121	88
240-149328-6	DUP-01	92
240-149328-7	MW-05_051121	94
240-149328-8	MW-03_051121	94
240-149329-H-3 MS	Matrix Spike	90
240-149329-N-3 MSD	Matrix Spike Duplicate	85
LCS 240-486344/4	Lab Control Sample	93
MB 240-486344/5	Method Blank	90

Surrogate Legend

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

QC Sample Results

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

Job ID: 240-149328-1

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

Lab Sample ID: MB 240-486721/7
Matrix: Water
Analysis Batch: 486721

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			05/20/21 13:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/20/21 13:48	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/20/21 13:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/20/21 13:48	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/20/21 13:48	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/20/21 13:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		75 - 130		05/20/21 13:48	1
4-Bromofluorobenzene (Surr)	98		47 - 134		05/20/21 13:48	1
Toluene-d8 (Surr)	106		69 - 122		05/20/21 13:48	1
Dibromofluoromethane (Surr)	111		78 - 129		05/20/21 13:48	1

Lab Sample ID: LCS 240-486721/5
Matrix: Water
Analysis Batch: 486721

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	27.3		ug/L		109	73 - 129
cis-1,2-Dichloroethene	25.0	28.1		ug/L		112	75 - 124
Tetrachloroethene	25.0	26.5		ug/L		106	70 - 125
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	74 - 130
Trichloroethene	25.0	26.7		ug/L		107	71 - 121
Vinyl chloride	25.0	24.3		ug/L		97	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		75 - 130
4-Bromofluorobenzene (Surr)	102		47 - 134
Toluene-d8 (Surr)	107		69 - 122
Dibromofluoromethane (Surr)	115		78 - 129

Lab Sample ID: 240-149329-G-3 MS
Matrix: Water
Analysis Batch: 486721

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	1.0	U	25.0	25.6		ug/L		102	64 - 132
cis-1,2-Dichloroethene	1.0	U	25.0	25.9		ug/L		104	68 - 121
Tetrachloroethene	1.0	U	25.0	26.9		ug/L		107	52 - 129
trans-1,2-Dichloroethene	1.0	U	25.0	25.9		ug/L		104	69 - 126
Trichloroethene	1.0	U	25.0	25.6		ug/L		103	56 - 124
Vinyl chloride	1.0	U	25.0	24.6		ug/L		98	49 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		75 - 130
4-Bromofluorobenzene (Surr)	103		47 - 134
Toluene-d8 (Surr)	104		69 - 122

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-149328-1

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

Lab Sample ID: 240-149329-G-3 MS
Matrix: Water
Analysis Batch: 486721

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

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	104		78 - 129

Lab Sample ID: 240-149329-M-3 MSD
Matrix: Water
Analysis Batch: 486721

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	1.0	U	25.0	26.0		ug/L		104	64 - 132	1	35
cis-1,2-Dichloroethene	1.0	U	25.0	26.6		ug/L		106	68 - 121	3	35
Tetrachloroethene	1.0	U	25.0	26.3		ug/L		105	52 - 129	2	35
trans-1,2-Dichloroethene	1.0	U	25.0	26.7		ug/L		107	69 - 126	3	35
Trichloroethene	1.0	U	25.0	26.4		ug/L		106	56 - 124	3	35
Vinyl chloride	1.0	U	25.0	25.8		ug/L		103	49 - 136	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107		75 - 130
4-Bromofluorobenzene (Surr)	106		47 - 134
Toluene-d8 (Surr)	109		69 - 122
Dibromofluoromethane (Surr)	110		78 - 129

Lab Sample ID: MB 240-486953/7
Matrix: Water
Analysis Batch: 486953

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			05/21/21 15:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			05/21/21 15:31	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			05/21/21 15:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			05/21/21 15:31	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			05/21/21 15:31	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			05/21/21 15:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		75 - 130		05/21/21 15:31	1
4-Bromofluorobenzene (Surr)	94		47 - 134		05/21/21 15:31	1
Toluene-d8 (Surr)	102		69 - 122		05/21/21 15:31	1
Dibromofluoromethane (Surr)	103		78 - 129		05/21/21 15:31	1

Lab Sample ID: LCS 240-486953/5
Matrix: Water
Analysis Batch: 486953

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	27.6		ug/L		111	73 - 129
cis-1,2-Dichloroethene	25.0	29.1		ug/L		116	75 - 124
Tetrachloroethene	25.0	28.0		ug/L		112	70 - 125
trans-1,2-Dichloroethene	25.0	27.2		ug/L		109	74 - 130
Trichloroethene	25.0	27.0		ug/L		108	71 - 121

Eurofins TestAmerica, Canton

QC Sample Results

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

Job ID: 240-149328-1

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

Lab Sample ID: LCS 240-486953/5
Matrix: Water
Analysis Batch: 486953

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	25.0	24.0		ug/L		96	61 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		75 - 130
4-Bromofluorobenzene (Surr)	103		47 - 134
Toluene-d8 (Surr)	103		69 - 122
Dibromofluoromethane (Surr)	113		78 - 129

Lab Sample ID: 190-25914-B-1 MS
Matrix: Water
Analysis Batch: 486953

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10	U	250	247		ug/L		99	64 - 132
cis-1,2-Dichloroethene	110		250	391		ug/L		114	68 - 121
Tetrachloroethene	10	U	250	264		ug/L		106	52 - 129
trans-1,2-Dichloroethene	18		250	288		ug/L		108	69 - 126
Trichloroethene	17		250	282		ug/L		106	56 - 124
Vinyl chloride	9.4	J	250	243		ug/L		93	49 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		75 - 130
4-Bromofluorobenzene (Surr)	99		47 - 134
Toluene-d8 (Surr)	104		69 - 122
Dibromofluoromethane (Surr)	107		78 - 129

Lab Sample ID: 190-25914-B-1 MSD
Matrix: Water
Analysis Batch: 486953

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	10	U	250	259		ug/L		104	64 - 132	5	35
cis-1,2-Dichloroethene	110		250	399		ug/L		117	68 - 121	2	35
Tetrachloroethene	10	U	250	246		ug/L		99	52 - 129	7	35
trans-1,2-Dichloroethene	18		250	295		ug/L		111	69 - 126	3	35
Trichloroethene	17		250	277		ug/L		104	56 - 124	2	35
Vinyl chloride	9.4	J	250	249		ug/L		96	49 - 136	2	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	112		75 - 130
4-Bromofluorobenzene (Surr)	100		47 - 134
Toluene-d8 (Surr)	104		69 - 122
Dibromofluoromethane (Surr)	116		78 - 129

QC Sample Results

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

Job ID: 240-149328-1

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

Lab Sample ID: MB 240-486344/5
Matrix: Water
Analysis Batch: 486344

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			05/18/21 14:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 133					05/18/21 14:01	1

Lab Sample ID: LCS 240-486344/4
Matrix: Water
Analysis Batch: 486344

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 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	93		70 - 133				

Lab Sample ID: 240-149329-H-3 MS
Matrix: Water
Analysis Batch: 486344

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)	90		70 - 133						

Lab Sample ID: 240-149329-N-3 MSD
Matrix: Water
Analysis Batch: 486344

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	10.2		ug/L		102	46 - 170	1	26
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	85		70 - 133								

QC Association Summary

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

Job ID: 240-149328-1

GC/MS VOA

Analysis Batch: 486344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-149328-2	MW-71_051121	Total/NA	Water	8260B SIM	
240-149328-3	MW-70_051121	Total/NA	Water	8260B SIM	
240-149328-4	MW-45_051121	Total/NA	Water	8260B SIM	
240-149328-5	MW-29_051121	Total/NA	Water	8260B SIM	
240-149328-6	DUP-01	Total/NA	Water	8260B SIM	
240-149328-7	MW-05_051121	Total/NA	Water	8260B SIM	
240-149328-8	MW-03_051121	Total/NA	Water	8260B SIM	
MB 240-486344/5	Method Blank	Total/NA	Water	8260B SIM	
LCS 240-486344/4	Lab Control Sample	Total/NA	Water	8260B SIM	
240-149329-H-3 MS	Matrix Spike	Total/NA	Water	8260B SIM	
240-149329-N-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B SIM	

Analysis Batch: 486721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-149328-1	TRIP BLANK_67	Total/NA	Water	8260B	
240-149328-2	MW-71_051121	Total/NA	Water	8260B	
240-149328-3	MW-70_051121	Total/NA	Water	8260B	
240-149328-4	MW-45_051121	Total/NA	Water	8260B	
240-149328-5	MW-29_051121	Total/NA	Water	8260B	
240-149328-7	MW-05_051121	Total/NA	Water	8260B	
240-149328-8	MW-03_051121	Total/NA	Water	8260B	
MB 240-486721/7	Method Blank	Total/NA	Water	8260B	
LCS 240-486721/5	Lab Control Sample	Total/NA	Water	8260B	
240-149329-G-3 MS	Matrix Spike	Total/NA	Water	8260B	
240-149329-M-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Analysis Batch: 486953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-149328-6	DUP-01	Total/NA	Water	8260B	
MB 240-486953/7	Method Blank	Total/NA	Water	8260B	
LCS 240-486953/5	Lab Control Sample	Total/NA	Water	8260B	
190-25914-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
190-25914-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

Lab Chronicle

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

Job ID: 240-149328-1

Client Sample ID: TRIP BLANK_67

Lab Sample ID: 240-149328-1

Date Collected: 05/11/21 00:00

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486721	05/20/21 17:09	SAM	TAL CAN

Client Sample ID: MW-71_051121

Lab Sample ID: 240-149328-2

Date Collected: 05/11/21 16:30

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486721	05/20/21 20:05	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		2	486344	05/18/21 21:07	CS	TAL CAN

Client Sample ID: MW-70_051121

Lab Sample ID: 240-149328-3

Date Collected: 05/11/21 15:00

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8.333	486721	05/20/21 20:30	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	486344	05/18/21 21:32	CS	TAL CAN

Client Sample ID: MW-45_051121

Lab Sample ID: 240-149328-4

Date Collected: 05/11/21 13:30

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		16.667	486721	05/20/21 20:56	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	486344	05/18/21 21:56	CS	TAL CAN

Client Sample ID: MW-29_051121

Lab Sample ID: 240-149328-5

Date Collected: 05/11/21 12:00

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486721	05/20/21 17:59	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		2	486344	05/18/21 22:21	CS	TAL CAN

Client Sample ID: DUP-01

Lab Sample ID: 240-149328-6

Date Collected: 05/11/21 00:00

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486953	05/21/21 15:57	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		2	486344	05/18/21 22:46	CS	TAL CAN

Lab Chronicle

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

Job ID: 240-149328-1

Client Sample ID: MW-05_051121

Lab Sample ID: 240-149328-7

Date Collected: 05/11/21 10:15

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486721	05/20/21 18:24	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	486344	05/18/21 23:11	CS	TAL CAN

Client Sample ID: MW-03_051121

Lab Sample ID: 240-149328-8

Date Collected: 05/11/21 08:45

Matrix: Water

Date Received: 05/13/21 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	486721	05/20/21 18:50	SAM	TAL CAN
Total/NA	Analysis	8260B SIM		1	486344	05/18/21 23:36	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: 240-149328-1

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	06-30-21
Georgia	State	4062	02-23-22
Illinois	NELAP	200004	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	03-31-22
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.



Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 149328

Client Arcadis Site Name Ford LTP
 Cooler Received on 5-13-21 Opened on 5-13-21
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Cooler unpacked by: Jme

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 +0.1 °C) Observed Cooler Temp. 3.1 °C Corrected Cooler Temp. 3.2 °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)?
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 NA
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 # covered 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: _____