

ANALYTICAL REPORT

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Laboratory Job ID: 460-197728-1
Client Project/Site: Ford LTP Off-Site

For:
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Authorized for release by:
12/11/2019 4:40:12 PM

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
Detection Summary	5
Client Sample Results	6
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	15
Lab Chronicle	16
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	22

Definitions/Glossary

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

Job ID: 460-197728-1

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.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Case Narrative

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

Job ID: 460-197728-1

Job ID: 460-197728-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Ford LTP Off-Site

Report Number: 460-197728-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Edison attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The samples were received on 11/26/2019 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.3° C, 2.3° C and 4.6° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples Trip Blank (460-197728-1), MW-87_112219 (460-197728-2), MW-77_112219 (460-197728-3), MW-87S-112219 (460-197728-4), MW-77S_112219 (460-197728-5) and MW-97S_112219 (460-197728-6) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 12/05/2019.

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

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples MW-87_112219 (460-197728-2), MW-77_112219 (460-197728-3), MW-87S-112219 (460-197728-4), MW-77S_112219 (460-197728-5) and MW-97S_112219 (460-197728-6) were analyzed for Volatile organic compounds (GC/MS) in accordance with SW-846 Method 8260C SIM. The samples were analyzed on 12/04/2019 and 12/05/2019.

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

Detection Summary

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

Job ID: 460-197728-1

Client Sample ID: Trip Blank

Lab Sample ID: 460-197728-1

No Detections.

Client Sample ID: MW-87_112219

Lab Sample ID: 460-197728-2

No Detections.

Client Sample ID: MW-77_112219

Lab Sample ID: 460-197728-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.72	J	1.0	0.22	ug/L	1		8260C	Total/NA

Client Sample ID: MW-87S-112219

Lab Sample ID: 460-197728-4

No Detections.

Client Sample ID: MW-77S_112219

Lab Sample ID: 460-197728-5

No Detections.

Client Sample ID: MW-97S_112219

Lab Sample ID: 460-197728-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Edison

Client Sample Results

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

Job ID: 460-197728-1

Client Sample ID: Trip Blank

Lab Sample ID: 460-197728-1

Date Collected: 11/22/19 15:10

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	-		12/05/19 10:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	-		12/05/19 10:33	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L	-		12/05/19 10:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L	-		12/05/19 10:33	1
Trichloroethene	1.0	U	1.0	0.31	ug/L	-		12/05/19 10:33	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L	-		12/05/19 10:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		12/05/19 10:33	1
Toluene-d8 (Surr)	103		80 - 120		12/05/19 10:33	1
Dibromofluoromethane (Surr)	97		72 - 131		12/05/19 10:33	1
4-Bromofluorobenzene	98		77 - 124		12/05/19 10:33	1

Client Sample ID: MW-87_112219

Lab Sample ID: 460-197728-2

Date Collected: 11/22/19 10:15

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C 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	0.33	ug/L	-		12/04/19 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		72 - 133		12/04/19 15:42	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	-		12/05/19 12:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	-		12/05/19 12:56	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L	-		12/05/19 12:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L	-		12/05/19 12:56	1
Trichloroethene	1.0	U	1.0	0.31	ug/L	-		12/05/19 12:56	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L	-		12/05/19 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		12/05/19 12:56	1
Toluene-d8 (Surr)	101		80 - 120		12/05/19 12:56	1
Dibromofluoromethane (Surr)	98		72 - 131		12/05/19 12:56	1
4-Bromofluorobenzene	99		77 - 124		12/05/19 12:56	1

Client Sample ID: MW-77_112219

Lab Sample ID: 460-197728-3

Date Collected: 11/22/19 14:15

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C 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	0.33	ug/L	-		12/05/19 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	86		72 - 133		12/05/19 17:32	1

Client Sample Results

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

Job ID: 460-197728-1

Client Sample ID: MW-77_112219

Lab Sample ID: 460-197728-3

Date Collected: 11/22/19 14:15

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/05/19 13:20	1
cis-1,2-Dichloroethene	0.72	J	1.0	0.22	ug/L			12/05/19 13:20	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/05/19 13:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/05/19 13:20	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/05/19 13:20	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/05/19 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		12/05/19 13:20	1
Toluene-d8 (Surr)	103		80 - 120		12/05/19 13:20	1
Dibromofluoromethane (Surr)	97		72 - 131		12/05/19 13:20	1
4-Bromofluorobenzene	96		77 - 124		12/05/19 13:20	1

Client Sample ID: MW-87S-112219

Lab Sample ID: 460-197728-4

Date Collected: 11/22/19 11:20

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C 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	0.33	ug/L			12/05/19 17:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	85		72 - 133		12/05/19 17:57	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/05/19 16:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/05/19 16:30	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/05/19 16:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/05/19 16:30	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/05/19 16:30	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/05/19 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		12/05/19 16:30	1
Toluene-d8 (Surr)	100		80 - 120		12/05/19 16:30	1
Dibromofluoromethane (Surr)	98		72 - 131		12/05/19 16:30	1
4-Bromofluorobenzene	97		77 - 124		12/05/19 16:30	1

Client Sample ID: MW-77S_112219

Lab Sample ID: 460-197728-5

Date Collected: 11/22/19 15:10

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C 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	0.33	ug/L			12/05/19 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	86		72 - 133		12/05/19 18:22	1

Client Sample Results

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

Job ID: 460-197728-1

Client Sample ID: MW-77S_112219

Lab Sample ID: 460-197728-5

Date Collected: 11/22/19 15:10

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	-		12/05/19 16:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	-		12/05/19 16:54	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L	-		12/05/19 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L	-		12/05/19 16:54	1
Trichloroethene	1.0	U	1.0	0.31	ug/L	-		12/05/19 16:54	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L	-		12/05/19 16:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		12/05/19 16:54	1
Toluene-d8 (Surr)	100		80 - 120		12/05/19 16:54	1
Dibromofluoromethane (Surr)	98		72 - 131		12/05/19 16:54	1
4-Bromofluorobenzene	100		77 - 124		12/05/19 16:54	1

Client Sample ID: MW-97S_112219

Lab Sample ID: 460-197728-6

Date Collected: 11/22/19 13:15

Matrix: Water

Date Received: 11/26/19 09:05

Method: 8260C 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	0.33	ug/L	-		12/05/19 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		72 - 133		12/05/19 18:47	1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L	-		12/05/19 17:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L	-		12/05/19 17:18	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L	-		12/05/19 17:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L	-		12/05/19 17:18	1
Trichloroethene	1.0	U	1.0	0.31	ug/L	-		12/05/19 17:18	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L	-		12/05/19 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		74 - 132		12/05/19 17:18	1
Toluene-d8 (Surr)	100		80 - 120		12/05/19 17:18	1
Dibromofluoromethane (Surr)	97		72 - 131		12/05/19 17:18	1
4-Bromofluorobenzene	99		77 - 124		12/05/19 17:18	1

Surrogate Summary

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

Job ID: 460-197728-1

Method: 8260C - Volatile Organic Compounds by 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 (74-132)	TOL (80-120)	DBFM (72-131)	BFB (77-124)
460-197728-1	Trip Blank	94	103	97	98
460-197728-2	MW-87_112219	96	101	98	99
460-197728-2 MS	MW-87-MS_112219	101	102	100	99
460-197728-2 MSD	MW-87-MSD_112219	97	101	97	98
460-197728-3	MW-77_112219	96	103	97	96
460-197728-3 MS	MW-77-MS_112219	98	102	99	99
460-197728-3 MSD	MW-77-MSD_112219	98	102	99	98
460-197728-4	MW-87S-112219	97	100	98	97
460-197728-5	MW-77S_112219	97	100	98	100
460-197728-6	MW-97S_112219	95	100	97	99
LCS 460-660092/4	Lab Control Sample	98	101	96	94
MB 460-660092/9	Method Blank	95	100	97	100

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

BFB = 4-Bromofluorobenzene

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB
		(72-133)
460-197728-2	MW-87_112219	93
460-197728-2 MS	MW-87-MS_112219	91
460-197728-2 MSD	MW-87-MSD_112219	94
460-197728-3	MW-77_112219	86
460-197728-3 MS	MW-77-MS_112219	86
460-197728-3 MSD	MW-77-MSD_112219	89
460-197728-4	MW-87S-112219	85
460-197728-5	MW-77S_112219	86
460-197728-6	MW-97S_112219	88
LCS 460-659865/3	Lab Control Sample	96
LCS 460-660111/4	Lab Control Sample	91
LCS 460-660269/4	Lab Control Sample	84
LCSD 460-660111/5	Lab Control Sample Dup	90
MB 460-659865/7	Method Blank	89
MB 460-660111/8	Method Blank	87
MB 460-660269/7	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

QC Sample Results

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

Job ID: 460-197728-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 460-660092/9
Matrix: Water
Analysis Batch: 660092

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	0.26	ug/L			12/05/19 10:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/05/19 10:09	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/05/19 10:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/05/19 10:09	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/05/19 10:09	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/05/19 10:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		74 - 132		12/05/19 10:09	1
Toluene-d8 (Surr)	100		80 - 120		12/05/19 10:09	1
Dibromofluoromethane (Surr)	97		72 - 131		12/05/19 10:09	1
4-Bromofluorobenzene	100		77 - 124		12/05/19 10:09	1

Lab Sample ID: LCS 460-660092/4
Matrix: Water
Analysis Batch: 660092

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	20.0	21.4		ug/L		107	74 - 123
cis-1,2-Dichloroethene	20.0	21.5		ug/L		108	80 - 120
Tetrachloroethene	20.0	20.8		ug/L		104	78 - 122
trans-1,2-Dichloroethene	20.0	20.5		ug/L		102	79 - 120
Trichloroethene	20.0	19.3		ug/L		97	77 - 120
Vinyl chloride	20.0	17.7		ug/L		88	62 - 138

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		74 - 132
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	96		72 - 131
4-Bromofluorobenzene	94		77 - 124

Lab Sample ID: 460-197728-2 MS
Matrix: Water
Analysis Batch: 660092

Client Sample ID: MW-87-MS_112219
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	20.0	21.7		ug/L		108	74 - 123
cis-1,2-Dichloroethene	1.0	U	20.0	22.7		ug/L		113	80 - 120
Tetrachloroethene	1.0	U	20.0	21.2		ug/L		106	78 - 122
trans-1,2-Dichloroethene	1.0	U	20.0	21.7		ug/L		109	79 - 120
Trichloroethene	1.0	U	20.0	20.0		ug/L		100	77 - 120
Vinyl chloride	1.0	U	20.0	24.8		ug/L		124	62 - 138

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		74 - 132
Toluene-d8 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	100		72 - 131

QC Sample Results

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

Job ID: 460-197728-1

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

Lab Sample ID: 460-197728-2 MS
Matrix: Water
Analysis Batch: 660092

Client Sample ID: MW-87-MS_112219
Prep Type: Total/NA

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene	99		77 - 124

Lab Sample ID: 460-197728-2 MSD
Matrix: Water
Analysis Batch: 660092

Client Sample ID: MW-87-MSD_112219
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	20.0	19.4		ug/L		97	74 - 123	11	30
cis-1,2-Dichloroethene	1.0	U	20.0	19.0		ug/L		95	80 - 120	17	30
Tetrachloroethene	1.0	U	20.0	19.1		ug/L		95	78 - 122	11	30
trans-1,2-Dichloroethene	1.0	U	20.0	19.3		ug/L		96	79 - 120	12	30
Trichloroethene	1.0	U	20.0	19.1		ug/L		95	77 - 120	5	30
Vinyl chloride	1.0	U	20.0	22.0		ug/L		110	62 - 138	12	30

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	97		74 - 132
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	97		72 - 131
4-Bromofluorobenzene	98		77 - 124

Lab Sample ID: 460-197728-3 MS
Matrix: Water
Analysis Batch: 660092

Client Sample ID: MW-77-MS_112219
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	20.0	19.9		ug/L		100	74 - 123
cis-1,2-Dichloroethene	0.72	J	20.0	20.6		ug/L		100	80 - 120
Tetrachloroethene	1.0	U	20.0	19.0		ug/L		95	78 - 122
trans-1,2-Dichloroethene	1.0	U	20.0	20.5		ug/L		103	79 - 120
Trichloroethene	1.0	U	20.0	19.4		ug/L		97	77 - 120
Vinyl chloride	1.0	U	20.0	21.8		ug/L		109	62 - 138

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	98		74 - 132
Toluene-d8 (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	99		72 - 131
4-Bromofluorobenzene	99		77 - 124

Lab Sample ID: 460-197728-3 MSD
Matrix: Water
Analysis Batch: 660092

Client Sample ID: MW-77-MSD_112219
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	20.0	19.6		ug/L		98	74 - 123	2	30
cis-1,2-Dichloroethene	0.72	J	20.0	21.0		ug/L		101	80 - 120	1	30
Tetrachloroethene	1.0	U	20.0	20.2		ug/L		101	78 - 122	6	30
trans-1,2-Dichloroethene	1.0	U	20.0	20.3		ug/L		101	79 - 120	1	30
Trichloroethene	1.0	U	20.0	19.4		ug/L		97	77 - 120	0	30

Eurofins TestAmerica, Edison

QC Sample Results

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

Job ID: 460-197728-1

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

Lab Sample ID: 460-197728-3 MSD

Client Sample ID: MW-77-MSD_112219

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 660092

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride	1.0	U	20.0	21.9		ug/L		109	62 - 138	0	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	98		74 - 132								
Toluene-d8 (Surr)	102		80 - 120								
Dibromofluoromethane (Surr)	99		72 - 131								
4-Bromofluorobenzene	98		77 - 124								

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

Lab Sample ID: MB 460-659865/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 659865

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	2.0	U	2.0	0.33	ug/L			12/04/19 13:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
4-Bromofluorobenzene	89		72 - 133						

Lab Sample ID: LCS 460-659865/3

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 659865

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	5.00	4.62		ug/L		92	66 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	96		72 - 133				

Lab Sample ID: 460-197728-2 MS

Client Sample ID: MW-87-MS_112219

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 659865

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.0	U	5.00	4.57		ug/L		91	66 - 135
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene	91		72 - 133						

Lab Sample ID: 460-197728-2 MSD

Client Sample ID: MW-87-MSD_112219

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 659865

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	5.00	5.07		ug/L		101	66 - 135	10	30

Eurofins TestAmerica, Edison

QC Sample Results

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

Job ID: 460-197728-1

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

Lab Sample ID: 460-197728-2 MSD
Matrix: Water
Analysis Batch: 659865

Client Sample ID: MW-87-MSD_112219
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	94		72 - 133

Lab Sample ID: MB 460-660111/8
Matrix: Water
Analysis Batch: 660111

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	0.33	ug/L			12/05/19 12:29	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene	87		72 - 133		12/05/19 12:29	1			

Lab Sample ID: LCS 460-660111/4
Matrix: Water
Analysis Batch: 660111

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	5.00	4.91		ug/L		98	66 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene	91		72 - 133				

Lab Sample ID: LCSD 460-660111/5
Matrix: Water
Analysis Batch: 660111

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,4-Dioxane	5.00	4.74		ug/L		95	66 - 135	4	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene	90		72 - 133						

Lab Sample ID: MB 460-660269/7
Matrix: Water
Analysis Batch: 660269

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	0.33	ug/L			12/06/19 01:47	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene	94		72 - 133		12/06/19 01:47	1			

QC Sample Results

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

Job ID: 460-197728-1

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

Lab Sample ID: LCS 460-660269/4
Matrix: Water
Analysis Batch: 660269

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	5.00	5.35		ug/L		107	66 - 135
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene	84		72 - 133				

Lab Sample ID: 460-197728-3 MS
Matrix: Water
Analysis Batch: 660269

Client Sample ID: MW-77-MS_112219
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	5.00	4.70		ug/L		94	66 - 135
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene	86		72 - 133						

Lab Sample ID: 460-197728-3 MSD
Matrix: Water
Analysis Batch: 660269

Client Sample ID: MW-77-MSD_112219
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	5.00	5.31		ug/L		106	66 - 135	12	30
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene	89		72 - 133								

QC Association Summary

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

Job ID: 460-197728-1

GC/MS VOA

Analysis Batch: 659865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-197728-2	MW-87_112219	Total/NA	Water	8260C SIM	
MB 460-659865/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-659865/3	Lab Control Sample	Total/NA	Water	8260C SIM	
460-197728-2 MS	MW-87-MS_112219	Total/NA	Water	8260C SIM	
460-197728-2 MSD	MW-87-MSD_112219	Total/NA	Water	8260C SIM	

Analysis Batch: 660092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-197728-1	Trip Blank	Total/NA	Water	8260C	
460-197728-2	MW-87_112219	Total/NA	Water	8260C	
460-197728-3	MW-77_112219	Total/NA	Water	8260C	
460-197728-4	MW-87S-112219	Total/NA	Water	8260C	
460-197728-5	MW-77S_112219	Total/NA	Water	8260C	
460-197728-6	MW-97S_112219	Total/NA	Water	8260C	
MB 460-660092/9	Method Blank	Total/NA	Water	8260C	
LCS 460-660092/4	Lab Control Sample	Total/NA	Water	8260C	
460-197728-2 MS	MW-87-MS_112219	Total/NA	Water	8260C	
460-197728-2 MSD	MW-87-MSD_112219	Total/NA	Water	8260C	
460-197728-3 MS	MW-77-MS_112219	Total/NA	Water	8260C	
460-197728-3 MSD	MW-77-MSD_112219	Total/NA	Water	8260C	

Analysis Batch: 660111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-197728-3	MW-77_112219	Total/NA	Water	8260C SIM	
460-197728-4	MW-87S-112219	Total/NA	Water	8260C SIM	
460-197728-5	MW-77S_112219	Total/NA	Water	8260C SIM	
460-197728-6	MW-97S_112219	Total/NA	Water	8260C SIM	
MB 460-660111/8	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-660111/4	Lab Control Sample	Total/NA	Water	8260C SIM	
LCSD 460-660111/5	Lab Control Sample Dup	Total/NA	Water	8260C SIM	

Analysis Batch: 660269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-660269/7	Method Blank	Total/NA	Water	8260C SIM	
LCS 460-660269/4	Lab Control Sample	Total/NA	Water	8260C SIM	
460-197728-3 MS	MW-77-MS_112219	Total/NA	Water	8260C SIM	
460-197728-3 MSD	MW-77-MSD_112219	Total/NA	Water	8260C SIM	

Lab Chronicle

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

Job ID: 460-197728-1

Client Sample ID: Trip Blank

Lab Sample ID: 460-197728-1

Date Collected: 11/22/19 15:10

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 10:33	CJM	TAL EDI

Client Sample ID: MW-87_112219

Lab Sample ID: 460-197728-2

Date Collected: 11/22/19 10:15

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 12:56	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	659865	12/04/19 15:42	SZD	TAL EDI

Client Sample ID: MW-77_112219

Lab Sample ID: 460-197728-3

Date Collected: 11/22/19 14:15

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 13:20	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	660111	12/05/19 17:32	SZD	TAL EDI

Client Sample ID: MW-87S-112219

Lab Sample ID: 460-197728-4

Date Collected: 11/22/19 11:20

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 16:30	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	660111	12/05/19 17:57	SZD	TAL EDI

Client Sample ID: MW-77S_112219

Lab Sample ID: 460-197728-5

Date Collected: 11/22/19 15:10

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 16:54	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	660111	12/05/19 18:22	SZD	TAL EDI

Client Sample ID: MW-97S_112219

Lab Sample ID: 460-197728-6

Date Collected: 11/22/19 13:15

Matrix: Water

Date Received: 11/26/19 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	660092	12/05/19 17:18	CJM	TAL EDI
Total/NA	Analysis	8260C SIM		1	660111	12/05/19 18:47	SZD	TAL EDI

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

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

Job ID: 460-197728-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State	<cert No.>	12-31-21
Georgia	State	12028 (NJ)	06-30-20
Massachusetts	State	M-NJ312	06-30-20
Massachusetts	State Program	M-NJ312	06-30-20
New Jersey	NELAP	12028	06-30-20
New York	NELAP	11452	04-01-20
Pennsylvania	NELAP	68-00522	02-28-20
Rhode Island	State	LAO00132	12-30-19
USDA	US Federal Programs	P330-18-00135	05-03-21

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	02-23-20
Connecticut	State	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
West Virginia DEP	State	210	12-31-19

Method Summary

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

Job ID: 460-197728-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
8260C SIM	Volatile Organic Compounds (GC/MS)	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900



Sample Summary

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

Job ID: 460-197728-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-197728-1	Trip Blank	Water	11/22/19 15:10	11/26/19 09:05	
460-197728-2	MW-87_112219	Water	11/22/19 10:15	11/26/19 09:05	
460-197728-3	MW-77_112219	Water	11/22/19 14:15	11/26/19 09:05	
460-197728-4	MW-87S-112219	Water	11/22/19 11:20	11/26/19 09:05	
460-197728-5	MW-77S_112219	Water	11/22/19 15:10	11/26/19 09:05	
460-197728-6	MW-97S_112219	Water	11/22/19 13:15	11/26/19 09:05	

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MICHIGAN 190 Chain of Custody Record

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



Client Contact

Company Name: Arcadis
 Address: 28350 Cabot Drive, Suite 500
 City/State/Zip: Novi, MI, 48317
 Phone: 248-994-2240

Regulatory program:

Client Project Manager: Kris Himskey
 Telephone: 248-994-2240
 Email: kris.himskey@arcadis.com

Site Contact: Rachel Bielek

Telephone: 248-946-6331
 Analysis Turnaround Time
 TAT if different from below
 10 day 3 weeks
 2 weeks 1 week
 2 days 1 day



460-197728 Chain of Custody

America Laboratories, Inc.
 No: _____
 of _____ COCs
 to use only

Project Name: Ford LTP Off-Site
 Project Number: 30016346.0002B
 PO # 30016346.0002B

Sample Name: S. JANSKI
 Method of Shipment/Carrier:
 Shipping/Tracking No:

Sample Specific Notes / Special Instructions:
 Lab sampling: 199928
 Job/SDG No:

Sample Identification	Sample Date	Sample Time	Matrix					Contaminant Specific Values							Filtered Sample (Y/N)	Composite (C) Grab (G)	Sample Specific Notes / Special Instructions		
			Air	Aqueous	Sediment	Solid	Other:	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:					
TRIP BLANK																			
MW-87-112219	1/22/19	1015	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1510	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1515	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1415	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1415	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1415	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1510	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS
MW-87-112219	1/22/19	1315	X					X	X	X	X	X	X	X	X	X	X	X	CONTAINERS

Special Instructions/QC Requirements & Comments:
 Submit all results through Cadena at jim.tomalita@cadenacom.com. Cadena #E203631
 Level IV Reporting requested.

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

Company: ARCADIS
 Company: ARCADIS
 Company: ARCADIS
 Company: ARCADIS

Date/Time: 1/22/19 1830
 Date/Time: 1/25/19 1048
 Date/Time: 1/25/19 1127
 Date/Time: 1/22/19 1830
 Date/Time: 1/25/19 1050
 Date/Time: 1/26/19

Received by: [Signature]
 Received by: [Signature]
 Received by: [Signature]
 Received by: [Signature]

07/06

Eurofins TestAmerica Edison
 Receipt Temperature and pH Log

Job Number: 199928

Number of Coolers: 3 IR Gun # 1
Cooler Temperatures

Cooler #	RAW		CORRECTED		Cooler #	RAW		CORRECTED	
	Temp	Temp	Temp	Temp		Temp	Temp	Temp	Temp
Cooler #1:	1.0°C	1.3°C	Cooler #4:	°C	Cooler #7:	°C	°C	°C	°C
Cooler #2:	2.6°C	2.3°C	Cooler #5:	°C	Cooler #8:	°C	°C	°C	°C
Cooler #3:	4.3°C	4.6°C	Cooler #6:	°C	Cooler #9:	°C	°C	°C	°C

TALS Sample Number	Ammonia	COD	Nitrate Nitrite	Metals *	Hardness	Pest	EPH or QAM	Phenols	Sulfide	TKN	TOC	Total Cyanide	Total Phos	Other	Other
(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH<2)	(pH 5-9)	(pH<2)	(pH<2)	(pH>9)	(pH<2)	(pH<2)	(pH<12)	(pH<2)		

If pH adjustments are required record the information below:

Sample No(s), adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

**Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: SS Date: 5/26/19

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 460-197728-1

Login Number: 197728

List Source: Eurofins TestAmerica, Edison

List Number: 1

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	CS#'s 1093638,1093639,1093641
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

