

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil
PO Box 4592
Houston TX 77210-4592

October 01, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/19/2014

Group Number: 1504630

SDG: PEO26

PO Number: 4410181435

Release Number: SIXSMITH

State of Sample Origin: AR

Client Sample DescriptionWS-007(0.5-1.0)091814 Grab Surface Water
WS-009(Surface)091814 Grab Surface Water
WS-001(0.5-1.0)091814 Grab Surface Water
WS-021(Surface)091814 Grab Surface Water
WS-004(0.5-1.0)091814 Grab Surface WaterLancaster Labs (LL) #7605967
7605968
7605969
7605970
7605971

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC ARCADIS

Attn: Stephen Barrick

COPY TO

ELECTRONIC ARCADIS

Attn: Lyndi Mott

COPY TO

ELECTRONIC ExxonMobil

Attn: Michael J. Firth

COPY TO

ELECTRONIC ARCADIS

Attn: Emily Leamer

COPY TO

ELECTRONIC ARCADIS

Attn: Rhiannon Parmalee

COPY TO

ELECTRONIC ExxonMobil

Attn: Michael L Sixsmith

COPY TO

ELECTRONIC ExxonMobil

Attn: Julie Foster

COPY TO

ELECTRONIC ARCADIS

Attn: Sonal Patil

COPY TO

ELECTRONIC ARCADIS

Attn: Kim Abbott

COPY TO

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LL Group #: 1504630

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:**SW-846 8270C SIM, GC/MS Semivolatiles****Sample #s: 7605968**

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Batch #: 14266WAL026 (Sample number(s): 7605967-7605971 UNSPK: P607919)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1-Methylnaphthalene, Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Benzo(a)anthracene, Chrysene

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: 1-Methylnaphthalene, Naphthalene, 2-Methylnaphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7605968

Sample Description: WS-007(0.5-1.0)091814 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7605967
LL Group # 1504630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/18/2014 15:45 by ZP

ExxonMobil

PO Box 4592

Submitted: 09/19/2014 08:05

Houston TX 77210-4592

Reported: 10/01/2014 10:11

P2601 SDG#: PEO26-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.017 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.061	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.061	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14266WAL026	09/26/2014 03:39	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14266WAL026	09/24/2014 10:30	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: WS-009(Surface)091814 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7605968
LL Group # 1504630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/18/2014 15:50 by ZP

ExxonMobil

PO Box 4592

Submitted: 09/19/2014 08:05

Houston TX 77210-4592

Reported: 10/01/2014 10:11

P2602 SDG#: PEO26-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.060	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.060	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14266WAL026	09/26/2014 04:07	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14266WAL026	09/24/2014 10:30	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: WS-001(0.5-1.0)091814 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7605969
LL Group # 1504630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/18/2014 16:00 by ZP

ExxonMobil

PO Box 4592

Submitted: 09/19/2014 08:05

Houston TX 77210-4592

Reported: 10/01/2014 10:11

P2603 SDG#: PEO26-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.060	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.060	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14266WAL026	09/26/2014 04:34	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14266WAL026	09/24/2014 10:30	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: WS-021(Surface)091814 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7605970
LL Group # 1504630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/18/2014 16:05 by ZP

ExxonMobil

PO Box 4592

Submitted: 09/19/2014 08:05

Houston TX 77210-4592

Reported: 10/01/2014 10:11

P2604 SDG#: PEO26-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.062	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.062	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14266WAL026	09/26/2014 05:01	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14266WAL026	09/24/2014 10:30	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Sample Description: WS-004(0.5-1.0)091814 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7605971
LL Group # 1504630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/18/2014 16:10 by ZP

ExxonMobil

PO Box 4592

Submitted: 09/19/2014 08:05

Houston TX 77210-4592

Reported: 10/01/2014 10:11

P2605 SDG#: PEO26-05*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.012 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.061	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.061	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14266WAL026	09/26/2014 05:29	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14266WAL026	09/24/2014 10:30	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ExxonMobil
Reported: 10/01/14 at 10:11 AM

Group Number: 1504630

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 14266WAL026	Sample number(s): 7605967-7605971								
Acenaphthene	N.D.	0.0025	0.013	ug/l	106		82-126		
Acenaphthylene	N.D.	0.0025	0.013	ug/l	84		72-124		
Anthracene	N.D.	0.0025	0.013	ug/l	93		83-125		
Benzo(a)anthracene	N.D.	0.0025	0.013	ug/l	99		79-122		
Benzo(a)pyrene	N.D.	0.0025	0.013	ug/l	93		72-126		
Benzo(b)fluoranthene	N.D.	0.0025	0.013	ug/l	104		79-136		
Benzo(g,h,i)perylene	N.D.	0.0025	0.013	ug/l	95		59-137		
Benzo(k)fluoranthene	N.D.	0.0025	0.013	ug/l	95		72-129		
Chrysene	N.D.	0.0025	0.013	ug/l	101		77-122		
Dibenz(a,h)anthracene	N.D.	0.0025	0.013	ug/l	92		42-143		
Fluoranthene	N.D.	0.0025	0.013	ug/l	107		76-121		
Fluorene	N.D.	0.0025	0.013	ug/l	95		82-119		
Indeno(1,2,3-cd)pyrene	N.D.	0.0025	0.013	ug/l	91		53-136		
1-Methylnaphthalene	N.D.	0.0025	0.013	ug/l	89		75-117		
2-Methylnaphthalene	N.D.	0.0025	0.013	ug/l	85		68-124		
Naphthalene	N.D.	0.0075	0.015	ug/l	85		78-117		
Phenanthrene	N.D.	0.0075	0.015	ug/l	94		83-116		
Pyrene	N.D.	0.0025	0.013	ug/l	88		70-124		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 14266WAL026	Sample number(s): 7605967-7605971 UNSPK: P607919								
Acenaphthene	90	192*	69-134	62*	30				
Acenaphthylene	84	169*	66-132	68*	30				
Anthracene	64	115	64-129	56*	30				
Benzo(a)anthracene	68	139*	37-135	70*	30				
Benzo(a)pyrene	52	106	32-137	69*	30				
Benzo(b)fluoranthene	56	121	41-137	74*	30				
Benzo(g,h,i)perylene	44	95	21-127	73*	30				
Benzo(k)fluoranthene	53	114	36-139	74*	30				
Chrysene	70	138*	51-129	66*	30				
Dibenz(a,h)anthracene	41	103	17-134	87*	30				
Fluoranthene	71	130	53-133	59*	30				
Fluorene	90	190*	59-137	58*	30				
Indeno(1,2,3-cd)pyrene	40	95	26-130	82*	30				

*- Outside of specification

**This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1504630

Reported: 10/01/14 at 10:11 AM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	45*	179*	60-129	43*	30				
2-Methylnaphthalene	87	173*	64-129	66*	30				
Naphthalene	93	182*	58-131	62*	30				
Phenanthrene	107	202*	66-126	61*	30				
Pyrene	62	126	49-136	67*	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAHs in waters by SIM

Batch number: 14266WAL026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7605967	83	62	74
7605968	78	31*	70
7605969	82	40	74
7605970	88	80	78
7605971	83	66	78
Blank	101	90	85
LCS	108	104	90
MS	74	63	94
MSD	65	59	88
Limits:	56-134	36-156	59-132

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



For Eurofins Lancaster Laboratories Environmental use only.
Acct. # 14739 Group # 1504630 Sample # _____
Instructions on reverse side correspond with circled numbers.

Group # 509630 Sample #

Instructions on reverse side correspond with circled numbers.

76059107-971

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7053 0713

Sample Administration
Receipt Documentation Log

Doc Log ID: 29753

Group Number(s): 1504630

Client: ExxonMobil

Delivery and Receipt Information

Delivery Method:	<u>UPS</u>	Arrival Timestamp:	<u>09/19/2014 8:05</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>

Arrival Condition Summary

Shipping Container Sealed:	<u>Yes</u>	Total Trip Blank Qty:	<u>0</u>
Custody Seal Present:	<u>Yes</u>	Trip Blank Type:	<u>N/A</u>
Custody Seal Intact:	<u>Yes</u>	Air Quality Samples Present:	<u>No</u>
Samples Chilled:	<u>Yes</u>	Air Quality Flow Controllers Present:	<u>N/A</u>
Paperwork Enclosed:	<u>Yes</u>	Flow Controller Quantity:	<u>0</u>
Samples Intact:	<u>Yes</u>	Air Quality Returns:	<u>N/A</u>
Missing Samples:	<u>No</u>		
Extra Samples:	<u>No</u>		
Discrepancy in Container Qty on COC:	<u>Yes</u>		
Sample IDs on COC match Containers:	<u>Yes</u>		
Sample Date/Times match COC:	<u>Yes</u>		
VOA Vial Headspace \geq 6mm:	<u>N/A</u>		
VOA IDs (\geq 6mm):	<u>N/A</u>		

Unpacked by Timothy Cubberley (6520) at 09:12 on 09/19/2014

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.4	DT	Wet	Y	Bagged	N

Container Quantity Discrepancy Details

Sample ID on COC	Container Qty. Received	Container Qty. on COC	Comments
SO-RO598-24-WC-091 814	5	6	
SO-RO80709-WC-0918 14	5	6	

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.