

## 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

January 24, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 01/04/2014

Group Number: 1443975

SDG: PEM79

PO Number: 4410181435

Release Number: SIXSMITH

State of Sample Origin: AR

### Client Sample Description

### Lancaster Labs (LL) #

WS-020(Surface)010214 Grab Surface Water	7328368
WS-007(0.5-1.0)010214 Grab Surface Water	7328369
WS-009(Surface)010214 Grab Surface Water	7328370
WS-001(0.5-1.0)010214 Grab Surface Water	7328371
WS-021(Surface)010214 Grab Surface Water	7328372
WS-004(0.5-1.0)010214 Grab Surface Water	7328373
WS-011(1.5-2.0)010314 Grab Surface Water	7328374
WS-011(5.0-5.5)010314 Grab Surface Water	7328375
WS-015(1.5-2.0)010314 Grab Surface Water	7328376
WS-015(3.5-4.0)010314 Grab Surface Water	7328377
WS-014(1.5-2.0)010314 Grab Surface Water	7328378
WS-014(5.5-6.0)010314 Grab Surface Water	7328379
WS-012(1.5-2.0)010314 Grab Surface Water	7328380
WS-012(5.0-5.5)010314 Grab Surface Water	7328381
WS-010(1.5-2.0)010314 Grab Surface Water	7328382
WS-010(3.5-4.0)010314 Grab Surface Water	7328383
WS-006(0.5-1.0)010314 Grab Surface Water	7328384
WS-006(0.5-1.0)010314MS Grab Surface Water	7328385
WS-006(0.5-1.0)010314MSD Grab Surface Water	7328386
DUP-WS-119-010314 Grab Surface Water	7328387
WS-EB-121-010314 Grab Water	7328388

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

ELECTRONIC      ARCADIS  
COPY TO

Attn: Stephen Barrick

ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer
ELECTRONIC COPY TO	ARCADIS	Attn: Rhiannon Parmalee
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael L Sixsmith
ELECTRONIC COPY TO	ExxonMobil	Attn: Julie Foster

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

---

Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1443975

### 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 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:

No additional comments are necessary.

Sample Description: WS-020 (Surface) 010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328368  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 10:30 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01020 SDG#: PEM79-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.011 J	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.024 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.018 J	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.014 J	0.010	0.052	1
08357	Chrysene	218-01-9	0.015 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.011 J	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.018 J	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	0.018 J	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	0.052 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.018 J	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	14006WAA026	01/08/2014 02:44	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-007(0.5-1.0)010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328369  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:05 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

01007 SDG#: PEM79-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	0.012 J	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	0.019 J	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	0.023 J	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	0.059	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	0.018 J	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	0.020 J	0.011	0.054	1
08357	Chrysene	218-01-9	0.037 J	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	0.046 J	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.019 J	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	0.037 J	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	0.044 J	0.011	0.054	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	14006WAA026	01/08/2014 03:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-009 (Surface) 010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328370  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:20 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01009 SDG#: PEM79-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.012 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	0.013 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	0.040 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.012 J	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	14006WAA026	01/08/2014 03:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-001(0.5-1.0)010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328371  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:30 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

1--01 SDG#: PEM79-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.011 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.039 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	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	14006WAA026	01/08/2014 04:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-021(Surface)010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328372  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:40 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

1-021 SDG#: PEM79-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.015 J	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	0.015 J	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	0.032 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.014 J	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	14006WAA026	01/08/2014 04:34	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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



Sample Description: WS-004(0.5-1.0)010214 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328373  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:50 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01004 SDG#: PEM79-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.013 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.011 J	0.011	0.053	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	14006WAA026	01/08/2014 05:02	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-011(1.5-2.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328374  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:00 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01011 SDG#: PEM79-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 05:29	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-011(5.0-5.5)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328375  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:10 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

02011 SDG#: PEM79-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	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	14006WAA026	01/08/2014 05:57	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-015(1.5-2.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328376  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:50 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01015 SDG#: PEM79-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	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	14006WAA026	01/08/2014 06:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-015(3.5-4.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328377  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:00 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

02015 SDG#: PEM79-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	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	14006WAA026	01/08/2014 06:52	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-014(1.5-2.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328378  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:10 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01014 SDG#: PEM79-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 07:20	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-014(5.5-6.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328379  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:20 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

02014 SDG#: PEM79-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	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	14006WAA026	01/08/2014 07:48	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-012(1.5-2.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328380  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:25 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

01012 SDG#: PEM79-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 08:15	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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



Sample Description: WS-012(5.0-5.5)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328381  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:35 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

02012 SDG#: PEM79-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	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	14006WAA026	01/08/2014 08:43	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-010(1.5-2.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328382  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:50 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01010 SDG#: PEM79-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.033 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	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	14006WAA026	01/08/2014 09:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-010(3.5-4.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328383  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:00 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

02010 SDG#: PEM79-16

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	N.D.	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	N.D.	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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 09:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-006(0.5-1.0)010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328384  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01006 SDG#: PEM79-17BKG

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	N.D.	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	N.D.	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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 01:21	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-006(0.5-1.0)010314MS Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328385  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

01006 SDG#: PEM79-17MS

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	1.1	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.2	0.010	0.051	1
08357	Anthracene	120-12-7	0.98	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.83	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	1.0	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.76	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.93	0.010	0.051	1
08357	Chrysene	218-01-9	0.93	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.76	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.2	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.031	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.051	1
08357	Pyrene	129-00-0	1.2	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	14006WAA026	01/08/2014 01:48	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-006 (0.5-1.0) 010314MSD Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328386  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil  
PO Box 4592  
Submitted: 01/04/2014 12:50 Houston TX 77210-4592  
Reported: 01/24/2014 14:50

01006 SDG#: PEM79-17MSD

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	1.0	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	0.93	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.91	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.79	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.96	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.71	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.89	0.010	0.051	1
08357	Chrysene	218-01-9	0.87	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.72	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.1	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	1.1	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	14006WAA026	01/08/2014 02:16	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: DUP-WS-119-010314 Grab Surface Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328387  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 by RL

ExxonMobil

PO Box 4592

Submitted: 01/04/2014 12:50

Houston TX 77210-4592

Reported: 01/24/2014 14:50

MAYFD SDG#: PEM79-18FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.031 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	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	14006WAA026	01/08/2014 10:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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

Sample Description: WS-EB-121-010314 Grab Water  
S20135565 Mayflower, AR  
Pipeline Incident

LL Sample # WW 7328388  
LL Group # 1443975  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 16:00 by RL ExxonMobil  
PO Box 4592  
Houston TX 77210-4592  
Submitted: 01/04/2014 12:50  
Reported: 01/24/2014 14:50

MAYFE SDG#: PEM79-19EB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	N.D.	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	N.D.	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	0.15	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	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	14006WAA026	01/08/2014 10:34	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14006WAA026	01/06/2014 16:00	David S Schrum	1

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



## Quality Control Summary

Client Name: ExxonMobil  
Reported: 01/24/14 at 02:50 PM

Group Number: 1443975

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: 14006WAA026	Sample number(s): 7328368-7328388								
Acenaphthene	N.D.	0.010	0.050	ug/l	108		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	114		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	108		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	106		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	107		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	121		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	98		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	112		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	108		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	96		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	109		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	107		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	96		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	110		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	108		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	106		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	110		71-130		

### 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: 14006WAA026	Sample number(s): 7328368-7328388 UNSPK: 7328384								
Acenaphthene	108	102	47-136	7	30				
Acenaphthylene	114	108	33-146	7	30				
Anthracene	95	92	69-119	5	30				
Benzo(a)anthracene	97	90	37-150	9	30				
Benzo(a)pyrene	81	78	64-123	5	30				
Benzo(b)fluoranthene	99	95	33-152	6	30				
Benzo(g,h,i)perylene	74	70	36-138	7	30				
Benzo(k)fluoranthene	90	88	31-142	4	30				
Chrysene	91	86	34-135	7	30				
Dibenz(a,h)anthracene	74	71	17-134	6	30				
Fluoranthene	109	104	39-147	7	30				
Fluorene	109	103	38-149	7	30				
Indeno(1,2,3-cd)pyrene	75	71	29-143	7	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  
Reported: 01/24/14 at 02:50 PM

Group Number: 1443975

### 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</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
1-Methylnaphthalene	113	109	49-152	6	30				
2-Methylnaphthalene	110	106	51-146	6	30				
Naphthalene	113	108	58-131	6	30				
Phenanthrene	110	105	48-140	6	30				
Pyrene	114	106	59-125	9	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: 14006WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7328368	103	94	104
7328369	101	83	104
7328370	94	71	104
7328371	104	85	106
7328372	105	90	108
7328373	100	90	101
7328374	102	85	107
7328375	102	89	104
7328376	107	92	109
7328377	106	89	108
7328378	104	88	104
7328379	103	93	105
7328380	103	83	105
7328381	95	79	98
7328382	101	81	105
7328383	101	70	106
7328384	95	71	97
7328385	105	87	111
7328386	101	85	106
7328387	105	88	107
7328388	107	103	105
Blank	100	95	100
LCS	106	104	110
MS	105	87	111
MSD	101	85	106
Limits:	44-137	62-141	51-136

\*- 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.

# ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories  
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1443975 Sample # 7328368-88

Instructions on reverse side correspond with circled numbers.

1 of 2

<b>1 Client Information</b>			<b>4 Matrix</b>			<b>5 Analyses Requested</b>										SCR#: _____		
Facility #/SID <u>Mayflower Pipeline Incident</u>			Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	Air <input type="checkbox"/>	Preservation Code										Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other		
Site Address <u>Mayflower, AR</u>						Total # of Containers <u>PAH 8270 SIM</u>											<b>6 Remarks</b>	
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE																
Consultant/Office <u>ARCADIS</u>																		
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-302-6799</u>																
Sampler <u>Ryan Lewis</u>			<b>3</b>															
<b>2 Sample Identification</b>			Collected															
		Date	Time	Grab	Composite													
<u>WS-020 (surface) 010214</u>		<u>1-2-2014</u>	<u>1030</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-007 (0.5-1.0) 010214</u>		<u>1-2-2014</u>	<u>1105</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-009 (surface) 010214</u>		<u>1-2-2014</u>	<u>1120</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-001 (0.5-1.0) 010214</u>		<u>1-2-2014</u>	<u>1130</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-021 (surface) 010214</u>		<u>1-2-2014</u>	<u>1140</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-004 (0.5-1.0) 010214</u>		<u>1-2-2014</u>	<u>1150</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-011 (1.5-2.0) 010314</u>		<u>1-3-2014</u>	<u>1300</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-011 (5.0-6.5) 010314</u>		<u>1-3-2014</u>	<u>1310</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-015 (1.5-2.0) 010314</u>		<u>1-3-2014</u>	<u>1350</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-015 (3.5-4.0) 010314</u>		<u>1-3-2014</u>	<u>1400</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-014 (1.5-2.0) 010314</u>		<u>1-3-2014</u>	<u>1410</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<u>WS-014 (5.5-6.0) 010314</u>		<u>1-3-2014</u>	<u>1420</u>	<u>X</u>			<u>X</u>			<u>2</u>	<u>X</u>							
<b>7 Turnaround Time Requested (TAT) (please circle)</b>			Relinquished by			Date		Time		Received by			Date		Time			
Standard <input checked="" type="radio"/> 5 day      4 day 72 hour      48 hour      24 hour			<i>[Signature]</i>			<u>1-3-2014</u>		<u>1630</u>		<i>[Signature]</i>								
			Relinquished by			Date		Time		Received by			Date		Time			
			Relinquished by			Date		Time		Received by			Date		Time			
<b>8 Data Package (circle if required)</b>			<b>EDD (circle if required)</b>			Relinquished by Commercial Carrier						Received by		Date		Time		
Type I - Full Type VI (Raw Data) NJ Reduced Other _____			Locus EIM (default) Other _____			UPS <input checked="" type="checkbox"/> FedEx _____      Other _____						<i>[Signature]</i>		<u>1/4/14</u>		<u>1250</u>		
Temperature Upon Receipt <u>0.2-0.3 °C</u>						Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No												

# ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories  
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only  
Group # 1443975 Sample # 7328368-88  
Instructions on reverse side correspond with circled numbers.

2 of 2

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks																		
Facility #/SID <u>Mayflower Pipeline Incident</u>				Sediment <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input checked="" type="checkbox"/>	Potable <input type="checkbox"/>	NPDES <input type="checkbox"/>	Air <input type="checkbox"/>	Oil <input type="checkbox"/>	Total # of Containers <u>PAH 8270 SIM</u>	Preservation Code										Preservation Codes														
Site Address <u>Mayflower, AR</u>												<table border="1" style="width: 100%; height: 100px;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>																								
ExxonMobil PM <u>Scott Bushroe</u>				Soil <input type="checkbox"/>				Water <input type="checkbox"/>				Composite <input type="checkbox"/>				SCR#: _____		7																		
Cost Center/AFE																																				
Consultant/Office <u>ARCADIS</u>				Grab <input type="checkbox"/>				Time				Date				Time		9																		
Consultant PM <u>Steve Berdick</u>																																				
Consultant Phone # <u>919-302-6799</u>				Date				Time				Date				Time		Time																		
Sampler <u>Ryan Lewis</u>																																				
2 Sample Identification				Collected				Date				Time				Date				Time																
Date				Time																																
<u>WS-012 (1.5-2.0) 010314</u>				<u>1-3-2014</u>				<u>1425</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-012 (5.0-5.5) 010314</u>				<u>1-3-2014</u>				<u>1435</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-010 (1.5-2.0) 010314</u>				<u>1-3-2014</u>				<u>1450</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-010 (3.5-4.0) 010314</u>				<u>1-3-2014</u>				<u>1500</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-006 (0.5-1.0) 010314</u>				<u>1-3-2014</u>				<u>1510</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-006 (0.5-1.0) 010314 MS/MSD</u>				<u>1-3-2014</u>				<u>1510</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>DUP-WS-119-010314</u>				<u>1-3-2014</u>				<u>—</u>				<u>X</u>				<u>X</u>		<u>X</u>																		
<u>WS-EB-121-010314</u>				<u>1-3-2014</u>				<u>1600</u>				<u>X</u>				<u>X</u>		<u>X</u>																		

G:1443975

Client: Exxon Mobil

**Mayflower Pipeline Incident**

**Delivery and Receipt Information**

Delivery Method:	<u>UPS</u>	Arrival Timestamp:	<u>01/04/2014 12:50</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>AR</u>		

**Arrival Condition Summary**

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

Unpacked by Wesley Miller (2308) at 13:04 on 01/04/2014

**Samples Chilled Details: Mayflower Pipeline Incident**

Cooler #	Thermometer ID	Raw Temp (°C)	Corrected Temp (°C)	Thermometer Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.3	0.3	DT	Wet	Y	Bagged	N
2	DT121	0.2	0.2	DT	Wet	Y	Bagged	N

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter

< less than - The number following the sign is the limit of quantitation, 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**

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns  $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

**Inorganic Qualifiers**

- B** Value is  $<$ CRDL, but  $\geq$ IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- \*** Duplicate analysis not within control limits
- +** 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.