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: 01/14/2014
Group Number: 1445740
SDG: PEM80
PO Number: 4410181435
Release Number: SIXSMITH
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-008(Surface)01112014 Grab Surface Water	7335093
WS-020(Surface)01112014 Grab Surface Water	7335094
WS-007(0.5-1.0)01112014 Grab Surface Water	7335095
WS-009(Surface)01112014 Grab Surface Water	7335096
WS-001(0.5-1.0)01112014 Grab Surface Water	7335097
WS-021(Surface)01112014 Grab Surface Water	7335098
WS-004(0.5-1.0)01112014 Grab Surface Water	7335099
WS-011(1.5-2.0)01122014 Grab Surface Water	7335100
WS-011(5.0-5.5)01122014 Grab Surface Water	7335101
WS-014(1.5-2.0)01122014 Grab Surface Water	7335102
WS-014(6.0-6.5)01122014 Grab Surface Water	7335103
WS-015(1.5-2.0)01122014 Grab Surface Water	7335104
WS-015(3.5-4.0)01122014 Grab Surface Water	7335105
WS-012(1.5-2.0)01122014 Grab Surface Water	7335106
WS-012(5.5-6.0)01122014 Grab Surface Water	7335107
WS-010(1.5-2.0)01122014 Grab Surface Water	7335108
WS-010(3.5-4.0)01122014 Grab Surface Water	7335109
WS-006(0.5-1.0)01122014 Grab Surface Water	7335110
WS-006(0.5-1.0)01122014MS Grab Surface Water	7335111
WS-006(0.5-1.0)01122014MSD Grab Surface Water	7335112
DUP-WS-120-01122014 Grab Surface Water	7335113
WS-EB-122-01122014 Grab Water	7335114

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1445740

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:

SW-846 8270C SIM, GC/MS Semivolatiles

Sample #s: 7335108, 7335109

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 #: 14015WAH026 (Sample number(s): 7335093-7335114 UNSPK: 7335110)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7335108, 7335109

Sample Description: WS-008(Surface)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335093
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 09:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

8SURF SDG#: PEM80-01

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	0.052	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	0.016 J	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.019 J	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.039 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.019 J	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.013 J	0.010	0.052	1
08357	Chrysene	218-01-9	0.028 J	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	0.040 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	0.015 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	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.090	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	14015WAH026	01/17/2014 02:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-020(Surface)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335094
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 11:50 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

20SUR SDG#: PEM80-02

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	0.051	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	0.017 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.024 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.053	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.024 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.018 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.055	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	0.051	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	0.021 J	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	0.031 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.033 J	0.030	0.051	1
08357	Pyrene	129-00-0	0.040 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	14015WAH026	01/17/2014 03:07	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-007(0.5-1.0)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335095
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 13:30 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

0751- SDG#: PEM80-03

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	0.051	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	0.013 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.018 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.046 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.020 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.015 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.034 J	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	0.051 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	0.018 J	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	0.041 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	14015WAH026	01/17/2014 03:35	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-009(Surface)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335096
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 13:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

9SR-- SDG#: PEM80-04

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	0.050	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	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	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	14015WAH026	01/17/2014 04:03	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-001(0.5-1.0)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335097
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 13:50 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1051- SDG#: PEM80-05

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	0.013 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	0.016 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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.011 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	14015WAH026	01/17/2014 04:31	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-021(Surface)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335098
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 14:00 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

21SR- SDG#: PEM80-06

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	0.011 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.	0.031	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	14015WAH026	01/17/2014 04:58	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-004(0.5-1.0)01112014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335099
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/11/2014 14:10 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

405-- SDG#: PEM80-07

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	0.012 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.030 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.014 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.011 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.025 J	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	0.038 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	0.012 J	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	0.030 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	14015WAH026	01/17/2014 05:26	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-011(1.5-2.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335100
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 09:25 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1115- SDG#: PEM80-08

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	14015WAH026	01/17/2014 05:54	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-011(5.0-5.5)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335101
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 09:30 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1150- SDG#: PEM80-09

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	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	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	14015WAH026	01/17/2014 06:22	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-014(1.5-2.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335102
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 10:20 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1415- SDG#: PEM80-10

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.	0.031	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	14015WAH026	01/17/2014 06:50	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-014(6.0-6.5)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335103
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 10:25 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1460- SDG#: PEM80-11

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	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	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	14015WAH026	01/17/2014 07:18	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-015(1.5-2.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335104
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 10:45 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1515- SDG#: PEM80-12

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	14015WAH026	01/17/2014 07:45	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-015(3.5-4.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335105
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 10:55 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1535- SDG#: PEM80-13

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.	0.031	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	14015WAH026	01/17/2014 08:13	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-012(1.5-2.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335106
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:05 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1215- SDG#: PEM80-14

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	14015WAH026	01/17/2014 08:41	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-012(5.5-6.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335107
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:10 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1255- SDG#: PEM80-15

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	14015WAH026	01/17/2014 09:09	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-010(1.5-2.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335108
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:30 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1015- SDG#: PEM80-16

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	0.050	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	0.011 J	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.023 J	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	0.020 J	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	0.033 J	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	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.028 J	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	14015WAH026	01/17/2014 09:36	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-010(3.5-4.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335109
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:35 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

1035- SDG#: PEM80-17

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	0.011 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.027 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.011 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.023 J	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	0.038 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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.032 J	0.010	0.051	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	14015WAH026	01/17/2014 10:04	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-006(0.5-1.0)01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335110
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

0605- SDG#: PEM80-18BKG

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	0.023 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	0.019 J	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	0.030 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	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.024 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	14015WAH026	01/17/2014 01:16	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-006(0.5-1.0)01122014MS Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335111
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

0605- SDG#: PEM80-18MS

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	1.1	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	1.0	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	1.1	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	1.1	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	1.1	0.010	0.051	1
08357	Chrysene	218-01-9	1.0	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	1.0	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	1.0	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	1.1	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	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	14015WAH026	01/17/2014 01:44	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-006(0.5-1.0)01122014MSD Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335112
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 11:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

0605- SDG#: PEM80-18MSD

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	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	1.1	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	0.97	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	1.1	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	1.0	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	1.0	0.010	0.051	1
08357	Chrysene	218-01-9	1.0	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.95	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	0.96	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	1.2	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	14015WAH026	01/17/2014 02:12	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: DUP-WS-120-01122014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335113
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

FD120 SDG#: PEM80-19FD

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	0.024 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	0.020 J	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	0.032 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	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.026 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	14015WAH026	01/17/2014 10:32	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Sample Description: WS-EB-122-01122014 Grab Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7335114
LL Group # 1445740
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/12/2014 15:40 by ZP

Submitted: 01/14/2014 09:25
Reported: 01/24/2014 14:50

ExxonMobil
PO Box 4592
Houston TX 77210-4592

EB122 SDG#: PEM80-20EB*

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	0.17	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	14015WAH026	01/17/2014 11:00	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14015WAH026	01/15/2014 22:00	Elaine F Stoltzfus	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1445740
Reported: 01/24/14 at 02:50 PM

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

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 14015WAH026	Sample number(s): 7335093-7335114								
Acenaphthene	N.D.	0.010	0.050	ug/l	111		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	118		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	117		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	108		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	120		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	121		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	110		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	109		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	118		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	105		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	111		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	117		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	115		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	116		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	113		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	110		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	115		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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 14015WAH026	Sample number(s): 7335093-7335114 UNSPK: 7335110								
Acenaphthene	110	107	47-136	3	30				
Acenaphthylene	116	112	33-146	3	30				
Anthracene	113	109	69-119	4	30				
Benzo(a)anthracene	107	101	37-150	5	30				
Benzo(a)pyrene	100	96	64-123	4	30				
Benzo(b)fluoranthene	110	106	33-152	4	30				
Benzo(g,h,i)perylene	103	98	36-138	5	30				
Benzo(k)fluoranthene	104	99	31-142	5	30				
Chrysene	98	97	34-135	1	30				
Dibenz(a,h)anthracene	100	94	17-134	6	30				
Fluoranthene	104	101	39-147	3	30				
Fluorene	109	106	38-149	2	30				
Indeno(1,2,3-cd)pyrene	101	95	29-143	6	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: 1445740
Reported: 01/24/14 at 02:50 PM

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 MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	115	112	49-152	3	30				
2-Methylnaphthalene	113	109	51-146	3	30				
Naphthalene	114	110	58-131	3	30				
Phenanthrene	111	106	48-140	5	30				
Pyrene	117	113	59-125	3	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: 14015WAH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7335093	90	85	99
7335094	98	93	106
7335095	98	93	106
7335096	89	82	96
7335097	90	78	97
7335098	99	97	109
7335099	82	68	91
7335100	100	94	110
7335101	93	82	103
7335102	89	77	98
7335103	92	83	99
7335104	90	73	99
7335105	92	66	104
7335106	95	74	109
7335107	96	78	107
7335108	72	44*	87
7335109	81	53*	98
7335110	92	72	106
7335111	102	100	115
7335112	100	95	112
7335113	92	66	104
7335114	92	89	101
Blank	91	93	99
LCS	103	107	117
MS	102	100	115
MSD	100	95	112
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

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1445740 Sample # 7335093-114

Instructions on reverse side correspond with circled numbers.

1 of 2

SCR#: _____

1 Client Information

Facility #/SID: Mayflower Pipeline Incident

Site Address: Mayflower, AR

ExxonMobil PM: Scott Bushroe | Cost Center/AFE:

Consultant/Office: Arcadis

Consultant PM: Steve Barrick | Consultant Phone #: 919-302-6799

Sampler: Zack Powers, Matt Hamby, Clement Pappas

2 Sample Identification | **Collected** Date | Time | **3** Grab | Composite | **4 Matrix** Soil | Sediment | Water (Ground, Potable, Surface, NPDES) | Oil | Air | **Total # of Containers** | **5 Analyses Requested** Preservation Code: PAH 8270 SIM

Sample Identification	Date	Time	Grab	Composite	Soil	Sediment	Water	Oil	Air	Total # of Containers	PAH 8270 SIM
WS-008 (Surface) 01112014	1-11-14	0940	X				X			2	X
WS-020 (Surface) 01112014	1-11-14	1150	X				X			2	X
WS-007 (0.5-1.0) 01112014	1-11-14	1330	X				X			2	X
WS-009 (Surface) 01112014	1-11-14	1340	X				X			2	X
WS-001 (0.5-1.0) 0112014	1-11-14	1350	X				X			2	X
WS-021 (Surface) 01112014	1-11-14	1400	X				X			2	X
WS-004 (0.5-1.0) 01112014	1-11-14	1410	X				X			2	X
WS-011 (1.5-2.0) 01122014	1-12-14	0925	X				X			2	X
WS-011 (5.0-5.5) 01122014	1-12-14	0930	X				X			2	X
WS-014 (1.5-2.0) 01122014	1-12-14	1020	X				X			2	X
WS-014 (6.0-6.5) 01122014	1-12-14	1025	X				X			2	X
WS-015 (1.5-2.0) 01122014	1-12-14	1045	X				X			2	X

Preservation Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

6 Remarks

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
	1/13/14	1700			

9

Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____

Received by: _____ Date: 1/14/14 Time: 0925

Temperature Upon Receipt 2.1-4.1 °C

Custody Seals Intact? Yes No

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1445740 Sample # 733093-114
Instructions on reverse side correspond with circled numbers.

2 of 2

SCR#: _____

1 Client Information

Facility #/SID: Mayflower pipeline incident
Site Address: Mayflower AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: Arcadis
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Zach Powers, Matt Humby, Clement Papafio

4 Matrix

Soil ☐ Sediment ☐ Water: Ground ☐ Potable ☐ Surface ☒ NPDES ☐ Oil ☐ Air ☐

5 Analyses Requested

Preservation Code

Preservation Codes

H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

6 Remarks

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Total # of Containers	PAH 8270 SIM
WS-015 (3.5-4.0) 01122014	1-12-14	1055	X		2	X
WS-012 (1.5-2.0) 01122014	1-12-14	1105	X		2	X
WS-012 (5.5-6.0) 01122014	1-12-14	1110	X		2	X
WS-010 (1.5-2.0) 01122014	1-12-14	1130	X		2	X
WS-010 (3.5-4.0) 01122014	1-12-14	1135	X		2	X
WS-006 (0.5-1.0) 01122014	1-12-14	1140	X		2	X
WS-006 (0.5-1.0) 01122014 MS/MSD	1-12-14	1140	X		4	X
DUP-WS-120-01122014	1-12-14	—	X		2	X
WS-EB-122-01122014	1-12-14	1540	X		2	X

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	1/13/14	1700			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by [signature]	1/14/14	0925

Temperature Upon Receipt 2.1-4.1 °C

Custody Seals Intact? Yes No

9

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Sample Administration Receipt Documentation Log

Doc Log ID: 2202

Client: Mayflower Pipeline Incident

G-144540

Delivery and Receipt Information

Delivery Method:	UPS	Arrival Timestamp:	01/14/2014 9:25
Number of Packages:	2	Number of Projects:	1
State/Province of Origin:	AR		

Arrival Condition Summary

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

Unpacked by Joseph Gruber (5200) at 12:17 on 01/14/2014

Samples Chilled Details

Cooler #	Thermometer ID	Raw Temp (°C)	Corrected Temp (°C)	Thermometer Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.1	2.1	DT	Wet	Y	Bagged	N
2	DT131	4.1	4.1	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

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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 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 ≥ 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 ≥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.