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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

March 21, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 03/07/2014
Group Number: 1457739
SDG: PEM88
PO Number: 4410181435
Release Number: SIXSMITH
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-008(Surface)030614 Grab Surface Water	7385682
WS-007(0.5-1.0)030614 Grab Surface Water	7385683
WS-020(Surface)030614 Grab Surface Water	7385684
WS-009(Surface)030614 Grab Surface Water	7385685
WS-001(0.5-1.0)030614 Grab Surface Water	7385686
WS-021(Surface)030614 Grab Surface Water	7385687
WS-004(0.5-1.0)030614 Grab Surface Water	7385688
WS-011(1.5-2.0)030614 Grab Surface Water	7385689
WS-011(4.0-4.5)030614 Grab Surface Water	7385690
WS-014(1.5-2.0)030614 Grab Surface Water	7385691
WS-014(5.5-6.0)030614 Grab Surface Water	7385692
WS-015(1.5-2.0)030614 Grab Surface Water	7385693
WS-015(3.5-4.0)030614 Grab Surface Water	7385694
WS-012(1.5-2.0)030614 Grab Surface Water	7385695
WS-012(5.5-6.0)030614 Grab Surface Water	7385696
WS-010(1.5-2.0)030614 Grab Surface Water	7385697
WS-010(4.0-4.5)030614 Grab Surface Water	7385698
WS-006(0.5-1.0)030614 Grab Surface Water	7385699
WS-006(0.5-1.0)030614MS Grab Surface Water	7385700
WS-006(0.5-1.0)030614MSD Grab Surface Water	7385701
WS-EB-130-030614 Grab Water	7385702
DUP-WS-127-030614 Grab Surface Water	7385703

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
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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 #: 1457739

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: 7385694, 7385703

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 #: 14067WAH026 (Sample number(s): 7385682-7385703 UNSPK: 7385699)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7385694, 7385703

Sample Description: WS-008(Surface)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385682
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 08:50 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8801 SDG#: PEM88-01

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.	0.011	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	N.D.	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	14067WAH026	03/21/2014 03:47	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-007(0.5-1.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385683
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 09:40 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8802 SDG#: PEM88-02

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	0.011	J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.023	J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.020	J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.058		0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.021	J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.021	J	0.010	0.051	1
08357	Chrysene	218-01-9	0.062		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	0.075		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	0.020	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.		0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.030	0.051	1
08357	Pyrene	129-00-0	0.055		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	14067WAH026	03/21/2014 04:15	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-020(Surface)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385684
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 09:55 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8803 SDG#: PEM88-03

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	0.052	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	0.023 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	0.017 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	0.031 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	0.020 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	14067WAH026	03/21/2014 04:43	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-009(Surface)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385685
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 10:00 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8804 SDG#: PEM88-04

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	0.051	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	0.012 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	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	14067WAH026	03/21/2014 05:10	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-001(0.5-1.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385686
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 10:10 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8805 SDG#: PEM88-05

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	0.021 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	0.016 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	0.020 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	14067WAH026	03/21/2014 05:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-021(Surface)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385687
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 10:15 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8806 SDG#: PEM88-06

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	0.019 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	0.014 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	0.028 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	0.020 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	14067WAH026	03/21/2014 06:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-004(0.5-1.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385688
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 10:20 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8807 SDG#: PEM88-07

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	0.011 J	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	0.030 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.012 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	0.022 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	0.041 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	0.011 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.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.027 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	14067WAH026	03/21/2014 06:34	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-011(1.5-2.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385689
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 12:45 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8808 SDG#: PEM88-08

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	14067WAH026	03/21/2014 07:02	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-011(4.0-4.5)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385690
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 12:50 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8809 SDG#: PEM88-09

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	14067WAH026	03/21/2014 07:30	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-014(1.5-2.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385691
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 13:30 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8810 SDG#: PEM88-10

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.	0.030	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	14067WAH026	03/21/2014 07:58	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-014(5.5-6.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385692
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 13:35 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8811 SDG#: PEM88-11

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	0.051	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	14067WAH026	03/21/2014 08:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-015(1.5-2.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385693
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 13:45 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8812 SDG#: PEM88-12

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	14067WAH026	03/21/2014 08:53	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-015(3.5-4.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385694
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 13:50 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8813 SDG#: PEM88-13

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.	0.030	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

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	14067WAH026	03/21/2014 09:21	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-012(1.5-2.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385695
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 13:55 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8814 SDG#: PEM88-14

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	14067WAH026	03/21/2014 09:49	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-012(5.5-6.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385696
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:00 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8815 SDG#: PEM88-15

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	14067WAH026	03/21/2014 10:17	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-010(1.5-2.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385697
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:15 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8816 SDG#: PEM88-16

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	0.017 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	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	14067WAH026	03/21/2014 10:45	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-010(4.0-4.5)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385698
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:20 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8817 SDG#: PEM88-17

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	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.019 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	0.012 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	14067WAH026	03/21/2014 11:13	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-006(0.5-1.0)030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385699
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:30 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8818 SDG#: PEM88-18BKG

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	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	0.015 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	14067WAH026	03/21/2014 02:23	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-006(0.5-1.0)030614MS Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385700
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:30 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8818 SDG#: PEM88-18MS

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	0.99	0.010	0.051	1
08357	Anthracene	120-12-7	1.0	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	0.91	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	0.95	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.96	0.010	0.051	1
08357	Chrysene	218-01-9	0.98	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.96	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.0	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	0.96	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.98	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.96	0.010	0.051	1
08357	Naphthalene	91-20-3	0.99	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.98	0.030	0.051	1
08357	Pyrene	129-00-0	0.98	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	14067WAH026	03/21/2014 02:51	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-006(0.5-1.0)030614MSD Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385701
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 14:30 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8818 SDG#: PEM88-18MSD

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	1.0	0.010	0.051	1
08357	Anthracene	120-12-7	0.99	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	0.79	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.94	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.77	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.80	0.010	0.051	1
08357	Chrysene	218-01-9	0.91	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.77	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.0	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	0.77	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.98	0.010	0.051	1
08357	Naphthalene	91-20-3	0.99	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.0	0.030	0.051	1
08357	Pyrene	129-00-0	0.98	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	14067WAH026	03/21/2014 03:19	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: WS-EB-130-030614 Grab Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385702
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 15:10 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8819 SDG#: PEM88-19EB

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	0.20	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	14067WAH026	03/21/2014 11:40	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Sample Description: DUP-WS-127-030614 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7385703
LL Group # 1457739
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/06/2014 by ZP

Submitted: 03/07/2014 09:30
Reported: 03/21/2014 13:57

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8820 SDG#: PEM88-20FD*

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	0.016 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.	0.030	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

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	14067WAH026	03/21/2014 12:08	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14067WAH026	03/10/2014 10:00	David S Schrum	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1457739
Reported: 03/21/14 at 01:57 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: 14067WAH026	Sample number(s): 7385682-7385703								
Acenaphthene	N.D.	0.010	0.050	ug/l	110		83-119		
Acenaphthylene	N.D.	0.010	0.050	ug/l	99		81-130		
Anthracene	N.D.	0.010	0.050	ug/l	107		83-125		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	111		79-122		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	102		80-121		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	111		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	103		72-132		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	106		81-131		
Chrysene	N.D.	0.010	0.050	ug/l	102		84-118		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	102		66-133		
Fluoranthene	N.D.	0.010	0.050	ug/l	109		84-124		
Fluorene	N.D.	0.010	0.050	ug/l	104		82-119		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	103		68-132		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98		86-130		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	96		81-131		
Naphthalene	N.D.	0.030	0.050	ug/l	97		82-122		
Phenanthrene	N.D.	0.030	0.050	ug/l	98		83-116		
Pyrene	N.D.	0.010	0.050	ug/l	100		78-125		

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: 14067WAH026	Sample number(s): 7385682-7385703 UNSPK: 7385699								
Acenaphthene	111	112	60-130	1	30				
Acenaphthylene	98	98	75-132	1	30				
Anthracene	99	98	69-119	1	30				
Benzo(a)anthracene	107	100	37-135	6	30				
Benzo(a)pyrene	90	78	64-123	14	30				
Benzo(b)fluoranthene	98	92	41-137	6	30				
Benzo(g,h,i)perylene	94	75	21-127	22	30				
Benzo(k)fluoranthene	95	78	38-130	19	30				
Chrysene	96	89	58-117	7	30				
Dibenz(a,h)anthracene	95	76	17-134	22	30				
Fluoranthene	100	99	63-129	1	30				
Fluorene	102	103	74-127	1	30				
Indeno(1,2,3-cd)pyrene	95	76	26-130	22	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: 1457739
Reported: 03/21/14 at 01:57 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	97	98	82-133	2	30				
2-Methylnaphthalene	95	97	73-138	2	30				
Naphthalene	97	98	58-131	1	30				
Phenanthrene	97	101	72-126	4	30				
Pyrene	97	96	36-142	1	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: 14067WAH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7385682	95	63	94
7385683	80	86	80
7385684	94	82	94
7385685	107	92	98
7385686	99	90	88
7385687	112	100	103
7385688	109	98	100
7385689	110	105	101
7385690	98	92	88
7385691	112	102	102
7385692	114	104	106
7385693	104	73	96
7385694	112	94	42*
7385695	113	105	103
7385696	112	97	102
7385697	105	86	96
7385698	108	90	99
7385699	95	96	97
7385700	99	99	101
7385701	98	84	104
7385702	111	104	99
7385703	111	102	65*
Blank	108	113	105
LCS	104	110	103
MS	99	99	101
MSD	98	84	104
Limits:	59-128	62-141	70-134

*- 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 # 1457739 — Sample # 7385682-703

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: Zach Powers	

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	3 Composite	Total # of Containers	PAH 8270 SIM
WS-008 (Surface) 030614	3-6-14	0850	X		2	X
WS-007 (0.5-1.0) 030614	3-6-14	0940	X		2	X
WS-020 (Surface) 030614	3-6-14	0955	X		2	X
WS-009 (Surface) 030614	3-6-14	1000	X		2	X
WS-001 (0.5-1.0) 030614	3-6-14	1010	X		2	X
WS-021 (Surface) 030614	3-6-14	1015	X		2	X
WS-004 (0.5-1.0) 030614	3-6-14	1020	X		2	X
WS-011 (1.5-2.0) 030614	3-6-14	1245	X		2	X
WS-011 (4.0-4.5) 030614	3-6-14	1250	X		2	X
WS-014 (1.5-2.0) 030614	3-6-14	1330	X		2	X
WS-014 (5.5-6.0) 030614	3-6-14	1335	X		2	X
WS-015 (1.5-2.0) 030614	3-6-14	1345	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
	3-6-14	1600			

Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____

Received by: _____ Date 3/7/14 Time 930

Temperature Upon Receipt 0.4-0.9 °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 # 1457739 Sample # 7385682-703
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 #: 919-302-6999
Sampler: Zach Powers

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) 030614	3-6-14	1350	X		2	X
WS-012 (1.5-2.0) 030614	3-6-14	1355	X		2	X
WS-012 (5.5-6.0) 030614	3-6-14	1400	X		2	X
WS-010 (1.5-2.0) 030614	3-6-14	1415	X		2	X
WS-010 (4.0-4.5) 030614	3-6-14	1420	X		2	X
WS-006 (0.5-1.0) 030614	3-6-14	1430	X		2	X
WS-EB-130-030614	3-6-14	1510	X		2	X
DUP-WS-127-030614	3-6-14	—	X		2	X
WS-006 (0.5-1.0) 030614 MS/MSD	3-6-14	1430	X		4	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
	3-6-14	1600			
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	Date 3/7/14	Time 930

Temperature Upon Receipt 0.4-0.9 °C

Custody Seals Intact? (Yes) No

9

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Sample Administration Receipt Documentation Log

Doc Log ID: 8433

Group Number(s): 1457739

Client: ExxonMobil

Mayflower Pipeline Incident

Delivery and Receipt Information

Delivery Method:	UPS	Arrival Timestamp:	03/07/2014 9:30
Number of Packages:	2	Number of Projects:	1
State/Province of Origin:	AR		

Arrival Condition Summary

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

Unpacked by Wesley Miller (2308) at 13:33 on 03/07/2014

Samples Chilled Details: Mayflower Pipeline Incident

Thermometer Types: DT = Digital IR = Infrared

Cooler #	Thermometer ID	Raw Temp (°C)	Corrected Temp (°C)	Thermometer Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.4	0.4	DT	Wet	Y	Bagged	N
2	DT121	0.9	0.9	DT	Wet	Y	Bagged	N

General Comments:

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.