ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

November 27, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 11/15/2013
Group Number: 1434147
SDG: PEM64
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-020(Surface)111313 Grab Surface Water	7277888
WS-007(0.5-1.0)111313 Grab Surface Water	7277889
WS-009(Surface)111313 Grab Surface Water	7277890
WS-001(0.5-1.0)111313 Grab Surface Water	7277891
WS-021(Surface)111313 Grab Surface Water	7277892
WS-004(0.5-1.0)111313 Grab Surface Water	7277893
WS-011(1.5-2.0)111313 Grab Surface Water	7277894
WS-011(5.0-5.5)111313 Grab Surface Water	7277895
WS-EB-111-111313 Grab Water	7277896
WS-015(1.5-2.0)111413 Grab Surface Water	7277897
WS-015(3.5-4.0)111413 Grab Surface Water	7277898
WS-014(1.5-2.0)111413 Grab Surface Water	7277899
WS-014(5.5-6.0)111413 Grab Surface Water	7277900
WS-012(1.5-2.0)111413 Grab Surface Water	7277901
WS-012(5.0-5.5)111413 Grab Surface Water	7277902
WS-010(1.5-2.0)111413 Grab Surface Water	7277903
WS-010(3.5-4.0)111413 Grab Surface Water	7277904
WS-006(0.5-1.0)111413 Grab Surface Water	7277905
WS-006(0.5-1.0)111413MS Grab Surface Water	7277906
WS-006(0.5-1.0)111413MSD Grab Surface Water	7277907
WS-EB-112-111413 Grab Water	7277908
DUP-WS-112-111413 Grab Surface Water	7277909

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

ELECTRONIC COPY TO ARCADIS Attn: Stephen Barrick

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1434147

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: 7277889, 7277891, 7277899

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 #: 13320WAK026 (Sample number(s): 7277888-7277909 UNSPK: 7277905)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Anthracene, Benzo(a)pyrene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7277889, 7277891, 7277899

Sample Description: WS-020(Surface)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277888
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:00 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-20 SDG#: PEM64-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	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	0.16	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.033 J	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	13320WAK026	11/21/2013 20:17	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-007(0.5-1.0)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277889
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:10 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-07 SDG#: PEM64-02

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	0.052	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	0.019 J	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.016 J	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.035 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.016 J	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.015 J	0.010	0.052	1
08357	Chrysene	218-01-9	0.041 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	0.025 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	0.014 J	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.050 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.023 J	0.010	0.052	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	13320WAK026	11/21/2013 20:44	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-009(Surface)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277890
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:20 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-09 SDG#: PEM64-03

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	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	0.031 J	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	13320WAK026	11/21/2013 21:11	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-001(0.5-1.0)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277891
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:30 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-01 SDG#: PEM64-04

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	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	0.033 J	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	13320WAK026	11/21/2013 21:38	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-021(Surface)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277892
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:40 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-21 SDG#: PEM64-05

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	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	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	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	0.061	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.11	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	13320WAK026	11/21/2013 22:05	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-004(0.5-1.0)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277893
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 09:50 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-04 SDG#: PEM64-06

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	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	0.045 J	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	13320WAK026	11/21/2013 22:32	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-011(1.5-2.0)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277894
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 14:20 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-11 SDG#: PEM64-07

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.041 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13320WAK026	11/21/2013 23:00	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-011(5.0-5.5)111313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277895
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 14:30 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13112 SDG#: PEM64-08

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	0.017 J	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	0.014 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	0.051	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	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	0.048 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.037 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	13320WAK026	11/21/2013 23:27	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-EB-111-111313 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277896
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/13/2013 15:00 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13111 SDG#: PEM64-09EB

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	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13320WAK026	11/21/2013 23:54	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-015(1.5-2.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277897
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 11:30 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-15 SDG#: PEM64-10

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	0.032 J	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	13320WAK026	11/22/2013 00:21	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-015(3.5-4.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277898
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 11:40 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13152 SDG#: PEM64-11

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.	0.012	0.058	1
08357	Acenaphthylene	208-96-8	N.D.	0.012	0.058	1
08357	Anthracene	120-12-7	N.D.	0.012	0.058	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.012	0.058	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.012	0.058	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.012	0.058	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.012	0.058	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.012	0.058	1
08357	Chrysene	218-01-9	N.D.	0.012	0.058	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.012	0.058	1
08357	Fluoranthene	206-44-0	N.D.	0.012	0.058	1
08357	Fluorene	86-73-7	N.D.	0.012	0.058	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.012	0.058	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.012	0.058	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.012	0.058	1
08357	Naphthalene	91-20-3	N.D.	0.035	0.058	1
08357	Phenanthrene	85-01-8	N.D.	0.035	0.058	1
08357	Pyrene	129-00-0	N.D.	0.012	0.058	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	13320WAK026	11/22/2013 02:58	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-014(1.5-2.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277899
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 11:50 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-14 SDG#: PEM64-12

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

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	13320WAK026	11/22/2013 03:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-014(5.5-6.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277900
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:00 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13142 SDG#: PEM64-13

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13320WAK026	11/22/2013 03:52	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-012(1.5-2.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277901
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:10 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-12 SDG#: PEM64-14

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	13320WAK026	11/22/2013 04:19	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-012(5.0-5.5)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277902
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:20 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13122 SDG#: PEM64-15

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.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13320WAK026	11/22/2013 04:46	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-010(1.5-2.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277903
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:30 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13-10 SDG#: PEM64-16

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.	0.011	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	13320WAK026	11/22/2013 05:13	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-010(3.5-4.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277904
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:40 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

13102 SDG#: PEM64-17

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13320WAK026	11/22/2013 05:40	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-006(0.5-1.0)111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277905
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:50 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

1306- SDG#: PEM64-18BKG

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.	0.012	0.060	1
08357	Acenaphthylene	208-96-8	N.D.	0.012	0.060	1
08357	Anthracene	120-12-7	N.D.	0.012	0.060	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.012	0.060	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.012	0.060	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.012	0.060	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.012	0.060	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.012	0.060	1
08357	Chrysene	218-01-9	N.D.	0.012	0.060	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.012	0.060	1
08357	Fluoranthene	206-44-0	N.D.	0.012	0.060	1
08357	Fluorene	86-73-7	N.D.	0.012	0.060	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.012	0.060	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.012	0.060	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.012	0.060	1
08357	Naphthalene	91-20-3	N.D.	0.036	0.060	1
08357	Phenanthrene	85-01-8	N.D.	0.036	0.060	1
08357	Pyrene	129-00-0	N.D.	0.012	0.060	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	13320WAK026	11/21/2013 14:52	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-006(0.5-1.0)111413MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277906
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:50 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

1306- SDG#: PEM64-18MS

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	1.2	0.013	0.064	1
08357	Acenaphthylene	208-96-8	1.3	0.013	0.064	1
08357	Anthracene	120-12-7	0.72	0.013	0.064	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.013	0.064	1
08357	Benzo(a)pyrene	50-32-8	0.72	0.013	0.064	1
08357	Benzo(b)fluoranthene	205-99-2	1.1	0.013	0.064	1
08357	Benzo(g,h,i)perylene	191-24-2	1.2	0.013	0.064	1
08357	Benzo(k)fluoranthene	207-08-9	1.0	0.013	0.064	1
08357	Chrysene	218-01-9	1.1	0.013	0.064	1
08357	Dibenz(a,h)anthracene	53-70-3	1.2	0.013	0.064	1
08357	Fluoranthene	206-44-0	1.3	0.013	0.064	1
08357	Fluorene	86-73-7	1.2	0.013	0.064	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	1.2	0.013	0.064	1
08357	1-Methylnaphthalene	90-12-0	1.3	0.013	0.064	1
08357	2-Methylnaphthalene	91-57-6	1.2	0.013	0.064	1
08357	Naphthalene	91-20-3	1.3	0.039	0.064	1
08357	Phenanthrene	85-01-8	1.3	0.039	0.064	1
08357	Pyrene	129-00-0	1.1	0.013	0.064	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	13320WAK026	11/21/2013 15:19	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-006(0.5-1.0)111413MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277907
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 12:50 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

1306- SDG#: PEM64-18MSD

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	1.2	0.013	0.065	1
08357	Acenaphthylene	208-96-8	1.3	0.013	0.065	1
08357	Anthracene	120-12-7	0.80	0.013	0.065	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.013	0.065	1
08357	Benzo(a)pyrene	50-32-8	0.77	0.013	0.065	1
08357	Benzo(b)fluoranthene	205-99-2	1.2	0.013	0.065	1
08357	Benzo(g,h,i)perylene	191-24-2	1.2	0.013	0.065	1
08357	Benzo(k)fluoranthene	207-08-9	1.1	0.013	0.065	1
08357	Chrysene	218-01-9	1.1	0.013	0.065	1
08357	Dibenz(a,h)anthracene	53-70-3	1.3	0.013	0.065	1
08357	Fluoranthene	206-44-0	1.3	0.013	0.065	1
08357	Fluorene	86-73-7	1.3	0.013	0.065	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	0.013	0.065	1
08357	1-Methylnaphthalene	90-12-0	1.3	0.013	0.065	1
08357	2-Methylnaphthalene	91-57-6	1.3	0.013	0.065	1
08357	Naphthalene	91-20-3	1.3	0.039	0.065	1
08357	Phenanthrene	85-01-8	1.3	0.039	0.065	1
08357	Pyrene	129-00-0	1.2	0.013	0.065	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	13320WAK026	11/21/2013 15:46	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: WS-EB-112-111413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277908
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 13:30 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

E-112 SDG#: PEM64-19EB

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.	0.011	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	13320WAK026	11/22/2013 06:08	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Sample Description: DUP-WS-112-111413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7277909
LL Group # 1434147
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 11/14/2013 by RL

Submitted: 11/15/2013 09:30
Reported: 11/27/2013 08:55

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

D-112 SDG#: PEM64-20FD*

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.	0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.056	1
08357	Anthracene	120-12-7	N.D.	0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.056	1
08357	Chrysene	218-01-9	N.D.	0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.056	1
08357	Fluorene	86-73-7	N.D.	0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.056	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.056	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.056	1
08357	Pyrene	129-00-0	N.D.	0.011	0.056	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	13320WAK026	11/22/2013 06:35	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13320WAK026	11/18/2013 09:00	Katheryne V Sponheimer	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1434147
Reported: 11/27/13 at 08:55 AM

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: 13320WAK026	Sample number(s): 7277888-7277909								
Acenaphthene	N.D.	0.010	0.050	ug/l	100		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	105		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	101		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	98		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	96		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	108		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	112		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	98		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	97		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	108		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	104		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	100		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	111		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	102		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	104		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	103		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	96		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: 13320WAK026	Sample number(s): 7277888-7277909 UNSPK: 7277905								
Acenaphthene	89	92	47-136	4	30				
Acenaphthylene	100	102	33-146	2	30				
Anthracene	56*	62*	69-119	11	30				
Benzo(a)anthracene	85	88	37-150	3	30				
Benzo(a)pyrene	56*	59*	64-123	6	30				
Benzo(b)fluoranthene	89	96	33-152	8	30				
Benzo(g,h,i)perylene	89	94	36-138	6	30				
Benzo(k)fluoranthene	79	83	31-142	5	30				
Chrysene	82	86	34-135	6	30				
Dibenz(a,h)anthracene	96	102	17-134	7	30				
Fluoranthene	99	102	39-147	4	30				
Fluorene	96	97	38-149	2	30				
Indeno(1,2,3-cd)pyrene	94	99	29-143	7	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1434147
Reported: 11/27/13 at 08:55 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1-Methylnaphthalene	100	102	49-152	2	30				
2-Methylnaphthalene	97	99	51-146	3	30				
Naphthalene	100	102	58-131	3	30				
Phenanthrene	100	102	48-140	2	30				
Pyrene	87	90	59-125	4	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: 13320WAK026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7277888	92	76	90
7277889	58	32*	63
7277890	97	73	92
7277891	92	54*	90
7277892	97	69	94
7277893	94	64	92
7277894	103	81	95
7277895	100	75	92
7277896	103	96	92
7277897	97	65	92
7277898	100	85	95
7277899	103	42*	96
7277900	102	93	96
7277901	99	78	93
7277902	102	85	95
7277903	101	83	94
7277904	102	79	96
7277905	100	80	93
7277906	99	83	96
7277907	102	88	97
7277908	102	96	95
7277909	103	86	97
Blank	106	96	94
LCS	101	96	100
MS	99	83	96
MSD	102	88	97
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

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Acct. # 14739 | For Eurofins Lancaster Laboratories Environmental use only: Group # 1434147 Sample # 7277888-909

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: Ryan Lewis / Clement Papafio

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

Sample Identification	Date	Time	Grab	Composite	Soil	Sediment	Water	Potable	Ground	NPDES	Surface	Oil	Air	Total # of Containers	PAH 8270SIM
WS-020 (surface) 111313	11-13-13	0900	X				X							2	X
WS-007 (0.5-1.0) 111313	11-13-13	0910	X				X							2	X
WS-009 (surface) 111313	11-13-13	0920	X				X							2	X
WS-001 (0.5-1.0) 111313	11-13-13	0930	X				X							2	X
WS-021 (surface) 111313	11-13-13	0940	X				X							2	X
WS-004 (0.5-1.0) 111313	11-13-13	0950	X				X							2	X
WS-011 (1.5-2.0) 111313	11-13-13	1420	X				X							2	X
WS-011 (5.0-5.5) 111313	11-13-13	1430	X				X							2	X
WS-EB-111-111313	11-13-13	1500	X				X							2	X
WS-015 (1.5-2.0) 111413	11-14-13	1130	X				X							2	X
WS-015 (3.5-4.0) 111413	11-14-13	1140	X				X							2	X
WS-014 (1.5-2.0) 111413	11-14-13	1150	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
Ryan Lewis	11-14-13	1530			
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 11/15/13	Time 930

Temperature Upon Receipt 0.5-0.7 °C

Custody Seals Intact? Yes No

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 434147 Sample # 7277888-909
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 Bushree
Cost Center/AFE:
Consultant/Office: ARCADIS
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Ryan Lewis

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-014(5.5-6.0)111413	11-14-13	1200	X		2	X
WS-012 (1.5-2.0) 111413	11-14-13	1210	X		2	X
WS-012 (5.0-5.5) 111413	11-14-13	1220	X		2	X
WS-010 (1.5-2.0) 111413	11-14-13	1230	X		2	X
WS-010 (3.5-4.0) 111413	11-14-13	1240	X		2	X
WS-006 (0.5-1.0) 111413	11-14-13	1250	X		2	X
WS-006 (0.5-1.0) 111413 MS/MSD	11-14-13	1250	X		2	X
WS-EB-112-111413	11-14-13	1330	X		2	X
DUP-WS-112-111413	11-14-13	—	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
Ryan Lewis	11-14-13	1530			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____				11/15/13	930

Temperature Upon Receipt 0.5-0.7 °C

Custody Seals Intact? (Yes) No

9

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7053 0713

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Environmental Sample Administration Receipt Documentation Log

1434147

Client/Project: Exxon Mobil

Date of Receipt: 11/15/13

Time of Receipt: 930

Source Code: Loc-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.7	TB	WI	Y	B	
2	↓	0.5	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Received 4 containers for MS-006 (0.5-1.0) 111413 MS/MSD

Unpacker Signature/Emp#: 2308 **Date/Time:** 11/15/13 1427

Issued by Dept. 6042 Management

2174.06

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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.