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

February 13, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 02/01/2014
Group Number: 1449781
SDG: PEM83
PO Number: 4410181435
Release Number: SIXSMITH
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-007(0.5-1.0)012914 Grab Surface Water	7352801
WS-009(Surface)012914 Grab Surface Water	7352802
WS-001(0.5-1.0)012914 Grab Surface Water	7352803
WS-021(Surface)012914 Grab Surface Water	7352804
WS-004(0.5-1.0)012914 Grab Surface Water	7352805
WS-020(Surface)013014 Grab Surface Water	7352806
WS-011(1.5-2.0)013114 Grab Surface Water	7352807
WS-011(5.5-6.0)013114 Grab Surface Water	7352808
WS-014(1.5-2.0)013114 Grab Surface Water	7352809
WS-014(5.5-6.0)013114 Grab Surface Water	7352810
WS-015(1.5-2.0)013114 Grab Surface Water	7352811
WS-015(3.5-4.0)013114 Grab Surface Water	7352812
WS-012(1.5-2.0)013114 Grab Surface Water	7352813
WS-012(5.5-6.0)013114 Grab Surface Water	7352814
WS-010(1.5-2.0)013114 Grab Surface Water	7352815
WS-010(3.5-4.0)013114 Grab Surface Water	7352816
WS-006(0.5-1.0)013114 Grab Surface Water	7352817
WS-006(0.5-1.0)013114MS Grab Surface Water	7352818
WS-006(0.5-1.0)013114MSD Grab Surface Water	7352819
WS-EB-126-013114 Grab Water	7352820
DUP-WS-123-013114 Grab Surface Water	7352821

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 #: 1449781

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: WS-007(0.5-1.0)012914 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352801
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/29/2014 13:55 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8301 SDG#: PEM83-01

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	0.050	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	0.011 J	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.014 J	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.036 J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.013 J	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.012 J	0.010	0.050	1
08357	Chrysene	218-01-9	0.016 J	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.033 J	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.013 J	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.030 J	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	14034WAC026	02/05/2014 20:17	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-009(Surface)012914 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352802
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/29/2014 14:05 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8302 SDG#: PEM83-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	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	14034WAC026	02/05/2014 20:44	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-001(0.5-1.0)012914 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352803
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/29/2014 14:10 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8303 SDG#: PEM83-03

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	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	14034WAC026	02/05/2014 21:12	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-021(Surface)012914 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352804
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/29/2014 14:20 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8304 SDG#: PEM83-04

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	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	14034WAC026	02/05/2014 21:40	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-004(0.5-1.0)012914 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352805
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/29/2014 14:30 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8305 SDG#: PEM83-05

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	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	14034WAC026	02/05/2014 22:08	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-020(Surface)013014 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352806
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/30/2014 10:35 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8306 SDG#: PEM83-06

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	0.018 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	0.013 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	0.019 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	0.014 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.058	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.016 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	14034WAC026	02/05/2014 22:36	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-011(1.5-2.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352807
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 08:40 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8307 SDG#: PEM83-07

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.	0.011	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	14034WAC026	02/05/2014 23:04	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-011(5.5-6.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352808
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 08:45 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8308 SDG#: PEM83-08

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	0.052	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	14034WAC026	02/05/2014 23:32	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-014(1.5-2.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352809
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 09:35 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8309 SDG#: PEM83-09

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	0.051	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	14034WAC026	02/06/2014 03:33	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-014(5.5-6.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352810
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 09:45 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8310 SDG#: PEM83-10

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	0.052	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	14034WAC026	02/06/2014 04:00	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-015(1.5-2.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352811
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:00 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8311 SDG#: PEM83-11

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.	0.031	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	14034WAC026	02/06/2014 04:28	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-015(3.5-4.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352812
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:05 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8312 SDG#: PEM83-12

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	14034WAC026	02/06/2014 04:56	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-012(1.5-2.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352813
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:20 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8313 SDG#: PEM83-13

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

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	14034WAC026	02/06/2014 05:23	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-012(5.5-6.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352814
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:25 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8314 SDG#: PEM83-14

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.	0.011	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	14034WAC026	02/06/2014 05:51	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-010(1.5-2.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352815
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:45 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8315 SDG#: PEM83-15

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	0.053	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	14034WAC026	02/06/2014 06:19	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-010(3.5-4.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352816
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 10:50 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8316 SDG#: PEM83-16

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14034WAC026	02/06/2014 06:47	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-006(0.5-1.0)013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352817
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 11:05 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8317 SDG#: PEM83-17BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	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	14034WAC026	02/05/2014 18:53	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-006(0.5-1.0)013114MS Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352818
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 11:05 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8317 SDG#: PEM83-17MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.052	1
08357	Anthracene	120-12-7	1.1	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.91	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	1.1	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.99	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.99	0.010	0.052	1
08357	Chrysene	218-01-9	0.95	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	1.0	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.1	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.98	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.052	1
08357	Naphthalene	91-20-3	1.1	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	1.2	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	14034WAC026	02/05/2014 19:21	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-006(0.5-1.0)013114MSD Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352819
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 11:05 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8317 SDG#: PEM83-17MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.97	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.051	1
08357	Anthracene	120-12-7	1.0	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.90	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	0.99	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.96	0.010	0.051	1
08357	Chrysene	218-01-9	0.93	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	1.0	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.0	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	0.99	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.0	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.0	0.030	0.051	1
08357	Pyrene	129-00-0	1.1	0.010	0.051	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14034WAC026	02/05/2014 19:49	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: WS-EB-126-013114 Grab Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352820
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 12:00 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8318 SDG#: PEM83-18EB

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	0.057	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	14034WAC026	02/06/2014 07:14	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Sample Description: DUP-WS-123-013114 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7352821
LL Group # 1449781
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/31/2014 by ZP

Submitted: 02/01/2014 08:55
Reported: 02/13/2014 09:08

ExxonMobil
PO Box 4592
Houston TX 77210-4592

P8319 SDG#: PEM83-19FD*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	14034WAC026	02/06/2014 07:42	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14034WAC026	02/04/2014 10:15	Anna E Stager	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1449781
Reported: 02/13/14 at 09:08 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: 14034WAC026	Sample number(s): 7352801-7352821								
Acenaphthene	N.D.	0.010	0.050	ug/l	101		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	109		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	111		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	107		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	103		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	113		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	96		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	103		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	100		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	87		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	111		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	104		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	92		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	110		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	110		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	107		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	106		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	109		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: 14034WAC026	Sample number(s): 7352801-7352821 UNSPK: 7352817								
Acenaphthene	100	95	47-136	7	30				
Acenaphthylene	107	102	33-146	7	30				
Anthracene	105	102	69-119	5	30				
Benzo(a)anthracene	107	103	37-150	6	30				
Benzo(a)pyrene	88	89	64-123	1	30				
Benzo(b)fluoranthene	102	99	33-152	5	30				
Benzo(g,h,i)perylene	95	97	36-138	0	30				
Benzo(k)fluoranthene	95	94	31-142	3	30				
Chrysene	92	92	34-135	2	30				
Dibenz(a,h)anthracene	96	100	17-134	2	30				
Fluoranthene	108	103	39-147	7	30				
Fluorene	104	98	38-149	8	30				
Indeno(1,2,3-cd)pyrene	95	98	29-143	1	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: 1449781
Reported: 02/13/14 at 09:08 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	109	105	49-152	6	30				
2-Methylnaphthalene	108	103	51-146	6	30				
Naphthalene	109	102	58-131	9	30				
Phenanthrene	104	99	48-140	7	30				
Pyrene	117	111	59-125	7	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: 14034WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7352801	95	85	102
7352802	97	92	98
7352803	99	94	102
7352804	101	95	103
7352805	95	89	99
7352806	86	82	91
7352807	94	88	99
7352808	96	88	102
7352809	89	67	96
7352810	93	67	102
7352811	93	79	100
7352812	99	94	102
7352813	90	64	93
7352814	97	88	101
7352815	89	82	93
7352816	102	90	107
7352817	99	92	102
7352818	100	89	105
7352819	95	91	100
7352820	98	98	101
7352821	97	96	101
Blank	97	99	102
LCS	101	95	105
MS	100	89	105
MSD	95	91	100
Limits:	44-137	62-141	51-136

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

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1449781 Sample # 735280l-21
Instructions on reverse side correspond with circled numbers.

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 #:
Sampler: Zach Powers / Danny Fitzgerald / Matt Hamby

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	8270 PAH
WS-007 (0.5-1.0) 01292014	1-29-14	1355	X		2	X
WS-009 (surface) 01292014	1-29-14	1405	X		2	X
WS-001 (0.5-1.0) 01292014	1-29-14	1410	X		2	X
WS-021 (surface) 01292014	1-29-14	1420	X		2	X
WS-004 (0.5-1.0) 01292014	1-29-14	1430	X		2	X
WS-020 (surface) 01302014	1-30-14	1035	X		2	X
WS-011 (1.5-2.0) 01312014	1-31-14	0840	X		2	X
WS-011 (5.5-6.0) 01312014	1-31-14	0845	X		2	X
WS-014 (1.5-2.0) 01312014	1-31-14	0935	X		2	X
WS-014 (5.5-6.0) 01312014	1-31-14	0945	X		2	X
WS-015 (1.5-2.0) 01312014	1-31-14	1000	X		2	X
WS-015 (3.5-4.0) 01312014	1-31-14	1005	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
Matt Hamby	1/31/14	1500			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by	2/1/14	855

Temperature Upon Receipt 0.2-2.1 °C

Custody Seals Intact? Yes No

9

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 — For Eurofins Lancaster Laboratories Environmental use only — Group # 1449781 Sample # 7352801-21

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 #:

Sampler: Zach Power / Danny Fitzgerald / Matt Hamby

4 Matrix

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

3 Grab / Composite

2 Sample Identification — Collected: Date / Time

5 Analyses Requested — Preservation Code

Total # of Containers | 8270 PAH

Sample Identification	Date	Time	Grab	Composite	Soil	Sediment	Water	Ground	Surface	Potable	NPDES	Oil	Air	Total # of Containers	8270 PAH
WS-012 (1.5-2.0)01312014	1-31-14	1020	X				X							2	X
WS-012 (5.5-6.0)01312014	1-31-14	1025	X				X							2	X
WS-010 (1.5-2.0)01312014	1-31-14	1045	X				X							2	X
WS-010 (3.5-4.0)01312014	1-31-14	1050	X				X							2	X
WS-006 (0.5-1.0) 01312014	1-31-14	1105	X				X							2	X
WS-006 (0.5-1.0)01312014 MS/MSD	1-31-14	1105	X				X							4	X
WS-EB-126-01312014	1-31-14	1200	X				X							2	X
Dup-WS-123-01312014	1-31-14	—	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
Matt Hamby	1/31/14	1500			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____					

9

Received by	Date	Time
	2/1/14	855

Temperature Upon Receipt 0.2-2.1 °C

Custody Seals Intact? (Yes) No

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

7053 0713

1449781

Katherine Klinefelter

From: Mott, Lyndi <Lyndi.Mott@arcadis-us.com>
Sent: Monday, February 03, 2014 1:58 PM
To: Katherine Klinefelter; Powers, Zachary; Parmelee, Rhiannon; Rachel Kreamer; SAEnvEntry@lancasterlabs.com
Cc: Abbott, Kim; Chandler, Jennifer; Patil, Sonal; Fitzgerald, Timothy (Danny); Kull, Valerie; Patel, Dakshesh
Subject: RE: Mayflower surface water sampling - Sample ID format question.

This project has been using 2-digit years, so date format of mmddyy. All, please continue to use this format.

Thank you,
Lyndi Mott | Project Chemistry/Data Quality Specialist | lyndi.mott@arcadis-us.com
ARCADIS U.S., Inc. | 2929 Briarpark Drive | Suite 300 | Houston, TX 77042
T. 713.953.4829 I T. 832.534.8140 I M. 315.569.9448
www.arcadis-us.com
ARCADIS, Imagine the result

From: Katherine Klinefelter [mailto:KatherineKlinefelter@eurofinsus.com]
Sent: Monday, February 03, 2014 12:36 PM
To: Powers, Zachary; Parmelee, Rhiannon; Rachel Kreamer; SAEnvEntry@lancasterlabs.com
Cc: Abbott, Kim; Mott, Lyndi; Chandler, Jennifer; Patil, Sonal; Brewer, Stacey; Lipka, Shelby; Lewis, Ryan; Quartey-Papafio, Clement; Fitzgerald, Timothy (Danny)
Subject: RE: Mayflower surface water sampling - Sample ID format question.

Hello,

Please see the attached COC for group 1449781. The usual format for sample IDs has included the date as MMDDYY. The attached COC is the second one that has the format as MMDDYYYY. The other group with MMDDYYYY format was 1445740, which has already reported. We are entering the sample IDs to match the COC. Is the format going to be changed to MMDDYYYY going forward? It appears to be varying by sample group with some January COCs submitted as MMDDYY and others as MMDDYYYY.
Thanks,
Kathy
Katherine Klinefelter
Principal Project Manager, Environmental Client Services

Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
USA
Phone: +1 717-556-7256
Fax: +1 717-656-6766
Website: www.LancasterLabsEnv.com
Please note my new email address: KatherineKlinefelter@eurofinsus.com

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14499781

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Sample Administration Receipt Documentation Log

Doc Log ID: 3514

Group Number(s): 1449781

Client: ExxonMobil

Mayflower Pipeline Incident

Delivery and Receipt Information

Delivery Method:	UPS	Arrival Timestamp:	02/01/2014 8:55
Number of Packages:	2	Number of Projects:	1
State/Province of Origin:	AR		

Arrival Condition Summary

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

Unpacked by Wesley Miller (2308) at 10:25 on 02/01/2014

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	0.2	0.2	DT	Wet	Y	Bagged	N
2	DT121	2.1	2.1	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.