

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ExxonMobil
Mobil Pipeline Company
PO Box 4416
Houston TX 77210-4416

August 06, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/30/2013

Group Number: 1407682

SDG: PEJ64

PO Number: ARCADIS

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-014(1.5-2.0)072913 Grab Surface Water	7143823
WS-014(5.5-6.0)072913 Grab Surface Water	7143824
WS-012(1.5-2.0)072913 Grab Surface Water	7143825
WS-012(5.0-5.5)072913 Grab Surface Water	7143826
WS-010(1.5-2.0)072913 Grab Surface Water	7143827
WS-010(3.5-4.0)072913 Grab Surface Water	7143828
WS-005(Surface)072913 Grab Surface Water	7143829
WS-011(1.5-2.0)072913 Grab Surface Water	7143830
WS-011(5.0-5.5)072913 Grab Surface Water	7143831
WS-003(Surface)072913 Grab Surface Water	7143832
WS-018(Surface)072913 Grab Surface Water	7143833
WS-002(Surface)072913 Grab Surface Water	7143834
WS-007(0.5-1.0)072913 Grab Surface Water	7143835
WS-006(0.5-1.0)072913 Grab Surface Water	7143836
WS-001(0.5-1.0)072913 Grab Surface Water	7143837
WS-EB-14-072913 Grab Water	7143838
DUP-WS-63-072913 Grab Surface Water	7143839
WS-TB-109-072913 Water	7143840

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

Attn: Michael J. Firth

COPY TO		
ELECTRONIC	ARCADIS	Attn: Emily Leamer
COPY TO		
ELECTRONIC	ARCADIS	Attn: Rhiannon Parmalee
COPY TO		
ELECTRONIC	ARCADIS	Attn: Jamie Pritchard
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
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ELECTRONIC	ExxonMobil	Attn: Julie Foster
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Carl Wideman
COPY TO		

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1407682

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 not 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**

Batch #: 13212WAE026 (Sample number(s): 7143823-7143839)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7143825, 7143828, 7143832, 7143835

Sample #s: 7143823, 7143824, 7143826, 7143827, 7143829, 7143830, 7143831, 7143833, 7143834, 7143835

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

Sample #s: 7143825, 7143828, 7143832

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. 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.

EPA 1664A, Wet Chemistry

Batch #: 13213807902A (Sample number(s): 7143823-7143837, 7143839 UNSPK: 7143823)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: HEM (oil & grease)

Sample Description: WS-014(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143823
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29141 SDG#: PEJ64-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-014(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143823
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29141 SDG#: PEJ64-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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 laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.2	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0308	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143823
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:20 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29141 SDG#: PEJ64-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.71	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.65	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 12:54	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 12:54	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 04:32	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:25	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 06:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143824
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29142 SDG#: PEJ64-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-014(5.5-6.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143824
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29142 SDG#: PEJ64-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.1	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0310	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(5.5-6.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143824
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29142 SDG#: PEJ64-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.70	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.65	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.8 J	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 13:16	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 13:16	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 05:02	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:29	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 06:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143825
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29121 SDG#: PEJ64-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-012(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143825
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29121 SDG#: PEJ64-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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 laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

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.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	25.4	0.033	0.20

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

Sample Description: WS-012(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143825
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:50 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29121 SDG#: PEJ64-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0303	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.75	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.67	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 13:38	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 13:38	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132111848006	08/01/2013 05:31	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:40	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 06:55	Damary Valentin	1

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

Sample Description: WS-012(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143825
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 08:50 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29121 SDG#: PEJ64-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143826
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29122 SDG#: PEJ64-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-012(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143826
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29122 SDG#: PEJ64-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	24.7	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0306	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-012(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143826
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29122 SDG#: PEJ64-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.61	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.61	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	mg/l		mg/l	mg/l		
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 11:47	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 11:47	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 06:00	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:44	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 06:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143827
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29101 SDG#: PEJ64-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-010(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143827
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29101 SDG#: PEJ64-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	24.5	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0037	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143827
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:20 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29101 SDG#: PEJ64-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.54	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.59	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 14:01	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 14:01	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 06:30	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:48	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 06:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143828
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29102 SDG#: PEJ64-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-010(3.5-4.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143828
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29102 SDG#: PEJ64-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

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.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	24.8	0.033	0.20

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

Sample Description: WS-010(3.5-4.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143828
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29102 SDG#: PEJ64-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0368	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.61	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.62	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	2.1 J	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 14:24	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 14:24	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132111848006	08/01/2013 07:00	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:51	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:01	Damary Valentin	1

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

Sample Description: WS-010(3.5-4.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143828
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29102 SDG#: PEJ64-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143829
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29105 SDG#: PEJ64-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	3.0 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-005(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143829
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29105 SDG#: PEJ64-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	24.9	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0243	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-005(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143829
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 09:50 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29105 SDG#: PEJ64-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.72	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.57	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 14:46	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 14:46	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 07:29	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143830
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29111 SDG#: PEJ64-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-011(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143830
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29111 SDG#: PEJ64-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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 laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.5	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0280	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-011(1.5-2.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143830
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:20 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29111 SDG#: PEJ64-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.73	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.73	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 15:08	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 15:08	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 07:58	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:55	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143831
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29112 SDG#: PEJ64-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-011(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143831
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:30 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29112 SDG#: PEJ64-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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 laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.8	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0284	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-011(5.0-5.5)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143831
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29112 SDG#: PEJ64-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.80	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.76	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 15:30	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 15:30	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 08:28	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 02:59	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143832
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:40 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29003 SDG#: PEJ64-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-003(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143832
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:40 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29003 SDG#: PEJ64-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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	0.16	0.010	0.051	1

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

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.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	26.2	0.033	0.20

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

Sample Description: WS-003 (Surface) 072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143832
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:40 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29003 SDG#: PEJ64-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0444	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.87	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.82	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 19:13	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 19:13	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132111848006	08/01/2013 08:57	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:03	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:13	Damary Valentin	1

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

Sample Description: WS-003 (Surface) 072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143832
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:40 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29003 SDG#: PEJ64-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-018(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143833
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29018 SDG#: PEJ64-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-018(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143833
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29018 SDG#: PEJ64-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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 laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.9	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0541	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-018(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143833
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 10:50 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29018 SDG#: PEJ64-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.79	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.79	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 16:59	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 16:59	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 09:27	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:07	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143834
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29002 SDG#: PEJ64-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-002(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143834
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29002 SDG#: PEJ64-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.7	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0252	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-002(Surface)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143834
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:20 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29002 SDG#: PEJ64-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.82	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.70	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
	mg/l		mg/l	mg/l		
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 17:21	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 17:21	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 09:56	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:10	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143835
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29007 SDG#: PEJ64-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	6.2	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	1.2 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-007(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143835
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29007 SDG#: PEJ64-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.5 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.077	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.54	0.010	0.051	1
08357	Anthracene	120-12-7	0.80	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.4	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	1.2	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	2.7	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	1.0	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	1.7	0.010	0.051	1
08357	Chrysene	218-01-9	2.8	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.42	0.010	0.051	1
08357	Fluoranthene	206-44-0	3.2	0.010	0.051	1
08357	Fluorene	86-73-7	0.13	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	1.3	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.050 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.075	0.010	0.051	1
08357	Naphthalene	91-20-3	0.059	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.79	0.030	0.051	1
08357	Pyrene	129-00-0	2.8	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	109	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0476	0.0068	0.0200	1
07046	Barium	7440-39-3	1.09	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0030 J	0.00076	0.0050	1

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

Sample Description: WS-007(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143835
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 11:50 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29007 SDG#: PEJ64-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	16.6	0.0334	0.200	1
07051	Chromium	7440-47-3	0.106	0.0016	0.0150	1
07055	Lead	7439-92-1	0.295	0.0047	0.0150	1
01757	Magnesium	7439-95-4	16.4	0.0167	0.100	1
07061	Nickel	7440-02-0	0.113	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.171	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00038	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 17:43	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 17:43	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 10:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:14	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143836
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29006 SDG#: PEJ64-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	4.6 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.2 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143836
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29006 SDG#: PEJ64-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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	0.086	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	37.3	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0142 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.165	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.40	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143836
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29006 SDG#: PEJ64-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0223	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0251	0.0047	0.0150	1
01757	Magnesium	7439-95-4	5.17	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0132	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0414	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 18:06	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 18:06	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 10:55	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:26	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143837
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29001 SDG#: PEJ64-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	3.1 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-001(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143837
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:20 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29001 SDG#: PEJ64-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.012 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.013 J	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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	24.9	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0353	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.56	0.0334	0.200	1

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

Sample Description: WS-001(0.5-1.0)072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143837
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 12:20 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29001 SDG#: PEJ64-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.67	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0015 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.9 J	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 18:28	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 18:28	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 11:24	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:29	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-EB-14-072913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143838
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 14:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29E14 SDG#: PEJ64-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-EB-14-072913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143838
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 14:00 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29E14 SDG#: PEJ64-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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	0.095	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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	1.6	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0062	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	0.513	0.0334	0.200	1

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

Sample Description: WS-EB-14-072913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143838
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 14:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29E14 SDG#: PEJ64-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	0.0760 J	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 11:02	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 11:02	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 11:54	Brian K Graham	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132176256001	08/05/2013 08:36	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:33	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1

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

Sample Description: DUP-WS-63-072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143839
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29D63 SDG#: PEJ64-17FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	4.2 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.2 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: DUP-WS-63-072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143839
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 by HVA

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29D63 SDG#: PEJ64-17FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
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	0.10	0.010	0.051	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	30.8	0.033	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0091 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.108	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.03	0.0334	0.200	1

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

Sample Description: DUP-WS-63-072913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143839
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/30/2013 09:25

PO Box 4416

Reported: 08/06/2013 08:40

Houston TX 77210-4416

29D63 SDG#: PEJ64-17FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0114 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0157	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.81	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0070 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0210	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 18:50	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 18:50	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13212WAE026	08/01/2013 12:23	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13212WAE026	07/31/2013 14:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132156256001	08/03/2013 10:53	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132111848004	08/03/2013 03:37	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132115713007	08/01/2013 07:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132111848004	07/31/2013 09:07	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132115713007	07/31/2013 16:20	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13213807902A	08/01/2013 15:39	Michelle L Lalli	1

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

Sample Description: WS-TB-109-072913 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143840
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29109 SDG#: PEJ64-18TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-TB-109-072913 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7143840
LL Group # 1407682
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/29/2013

ExxonMobil

Submitted: 07/30/2013 09:25

Mobil Pipeline Company

Reported: 08/06/2013 08:40

PO Box 4416

Houston TX 77210-4416

29109 SDG#: PEJ64-18TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	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
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132121AA	07/31/2013 11:24	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132121AA	07/31/2013 11:24	Kerri E Legerlotz	1

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

Quality Control SummaryClient Name: ExxonMobil
Reported: 08/06/13 at 08:40 AM

Group Number: 1407682

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

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: C132121AA	Sample number(s): 7143823-7143840								
Acetone	N.D.	3.0	5.0	ug/l	110		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	84		61-130		
Benzene	N.D.	0.1	0.5	ug/l	100		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	107		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	103		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	91		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	110		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	117		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	105		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	104		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	107		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	96		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	101		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	114		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	97		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	101		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	105		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	112		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	97		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	113		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	97		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	93		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	102		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	97		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	93		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	85		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	101		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	97		61-125		

*- 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: 1407682

Reported: 08/06/13 at 08:40 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	94		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	89		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	88		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	100		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Styrene	N.D.	0.1	0.5	ug/l	99		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	96		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	116		65-131		
Toluene	N.D.	0.1	0.5	ug/l	100		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	92		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	104		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	101		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	120		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	98		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	103		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	98		80-120		

Batch number: 13212WAE026	Sample number(s): 7143823-7143839								
Acenaphthene	N.D.	0.010	0.050	ug/l	98	99	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	103	105	72-113	2	30
Anthracene	N.D.	0.010	0.050	ug/l	108	108	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	98	95	75-115	3	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	94	98	72-120	4	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	92	94	74-130	2	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	92	95	63-121	3	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	100	106	74-118	6	30
Chrysene	N.D.	0.010	0.050	ug/l	94	98	75-112	4	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	86	91	66-122	6	30
Fluoranthene	N.D.	0.010	0.050	ug/l	109	112	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	96	96	74-115	0	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	90	92	66-122	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	106	108	72-114	2	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	103	105	74-119	2	30
Naphthalene	N.D.	0.030	0.050	ug/l	95	97	67-118	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	98	101	72-109	3	30
Pyrene	N.D.	0.010	0.050	ug/l	90	91	71-116	2	30

Batch number: 132111848004	Sample number(s): 7143823-7143839								
Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	103		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	101		90-112		
Calcium	0.0708 J	0.0334	0.200	mg/l	101		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	100		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	103		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	100		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	96		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	95		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	98		90-110		

*- 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: 1407682

Reported: 08/06/13 at 08:40 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 132115713007	Sample number(s): 7143823-7143839								
Mercury	N.D.	0.00006	0.00020	mg/l	100		80-120		
		0							
Batch number: 13213807902A	Sample number(s): 7143823-7143837, 7143839								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	96	107	78-114	11	16

Sample Matrix Quality Control

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

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: C132121AA	Sample number(s): 7143823-7143840 UNSPK: 7143823								
Acetone	118	117	57-163	1	30				
Allyl Chloride	84	90	67-139	6	30				
Benzene	103	108	87-126	5	30				
Bromobenzene	100	110	80-123	10	30				
Bromochloromethane	106	110	82-125	4	30				
Bromodichloromethane	105	111	82-133	6	30				
Bromoform	92	104	60-138	12	30				
Bromomethane	111	118	41-145	7	30				
2-Butanone	116	120	63-146	3	30				
n-Butylbenzene	103	115	83-131	10	30				
sec-Butylbenzene	103	114	84-128	10	30				
tert-Butylbenzene	100	114	84-135	14	30				
Carbon Tetrachloride	118	121	81-148	2	30				
Chlorobenzene	107	117	78-133	9	30				
Chloroethane	107	114	70-139	6	30				
Chloroform	110	114	86-136	3	30				
Chloromethane	98	104	55-152	6	30				
2-Chlorotoluene	100	111	81-120	10	30				
4-Chlorotoluene	102	113	82-119	10	30				
1,2-Dibromo-3-chloropropane	112	128	43-143	13	30				
Dibromochloromethane	98	108	79-125	9	30				
1,2-Dibromoethane	102	109	84-127	7	30				
Dibromomethane	104	108	83-126	4	30				
1,2-Dichlorobenzene	104	115	83-117	11	30				
1,3-Dichlorobenzene	103	114	81-118	10	30				
1,4-Dichlorobenzene	103	114	79-120	10	30				
Dichlorodifluoromethane	111	113	28-136	2	30				
1,1-Dichloroethane	101	105	88-136	4	30				
1,2-Dichloroethane	112	115	82-135	3	30				
1,1-Dichloroethene	106	110	83-150	4	30				
cis-1,2-Dichloroethene	103	107	82-129	4	30				
trans-1,2-Dichloroethene	109	113	88-127	4	30				
Dichlorofluoromethane	119	123	59-176	4	30				
1,2-Dichloropropane	102	109	91-126	6	30				
1,3-Dichloropropane	97	107	80-127	10	30				
2,2-Dichloropropane	100	105	80-134	5	30				
1,1-Dichloropropene	110	115	86-139	5	30				

*- Outside of specification

**.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil
Reported: 08/06/13 at 08:40 AM

Group Number: 1407682

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
cis-1,3-Dichloropropene	95	104	74-132	9	30				
trans-1,3-Dichloropropene	93	102	71-128	9	30				
Ethyl ether	77	78	67-127	1	30				
Ethylbenzene	103	112	80-140	8	30				
Freon 113	113	115	87-158	2	30				
Hexachlorobutadiene	106	115	65-128	9	30				
Isopropylbenzene	102	112	81-133	9	30				
p-Isopropyltoluene	100	110	84-124	9	30				
Methyl Tertiary Butyl Ether	86	94	82-132	8	30				
4-Methyl-2-Pentanone	87	100	69-149	14	30				
Methylene Chloride	101	103	84-122	2	30				
n-Propylbenzene	102	112	79-131	9	30				
Styrene	102	112	63-151	9	30				
1,1,1,2-Tetrachloroethane	102	114	87-126	11	30				
1,1,2,2-Tetrachloroethane	97	110	75-131	13	30				
Tetrachloroethene	110	115	75-129	5	30				
Tetrahydrofuran	114	116	56-154	2	30				
Toluene	104	111	83-127	7	30				
1,2,3-Trichlorobenzene	92	105	73-125	13	30				
1,2,4-Trichlorobenzene	94	106	77-120	12	30				
1,1,1-Trichloroethane	111	115	85-140	4	30				
1,1,2-Trichloroethane	102	113	85-129	10	30				
Trichloroethene	111	117	85-131	6	30				
Trichlorofluoromethane	131	133	67-161	2	30				
1,2,3-Trichloropropane	99	111	76-120	11	30				
1,2,4-Trimethylbenzene	100	111	87-126	11	30				
1,3,5-Trimethylbenzene	100	110	89-129	10	30				
Vinyl Chloride	108	117	65-151	8	30				
Xylene (Total)	102	111	81-137	9	30				

Batch number: 132111848004	Sample number(s): 7143823-7143839 UNSPK: 7143829 BKG: 7143829								
Arsenic	100	100	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	102	102	78-118	0	20	0.0243	0.0237	3 (1)	20
Cadmium	100	100	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	102	97	81-118	2	20	5.72	5.64	1	20
Chromium	100	100	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	102	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	100	96	75-125	2	20	2.57	2.50	3	20
Nickel	105	105	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	95	98	75-125	3	20	N.D.	N.D.	0 (1)	20
Silver	94	97	75-125	3	20	N.D.	N.D.	0 (1)	20
Vanadium	99	98	90-111	1	20	N.D.	N.D.	0 (1)	20

Batch number: 132115713007	Sample number(s): 7143823-7143839 UNSPK: 7143833 BKG: 7143833								
Mercury	101	101	80-120	0	20	N.D.	N.D.	0 (1)	20

Batch number: 13213807902A	Sample number(s): 7143823-7143837,7143839 UNSPK: 7143823								
HEM (oil & grease)	70*		78-114						

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil
Reported: 08/06/13 at 08:40 AM

Group Number: 1407682

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: BTEX 25-ml purge

Batch number: C132121AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7143823	103	99	98	95
7143824	104	99	98	94
7143825	104	98	98	94
7143826	104	99	98	95
7143827	104	98	98	95
7143828	104	99	98	95
7143829	104	98	98	94
7143830	104	99	98	94
7143831	104	99	98	95
7143832	104	98	98	95
7143833	102	98	98	95
7143834	103	99	98	95
7143835	104	100	97	95
7143836	103	98	97	94
7143837	103	101	98	95
7143838	103	100	98	95
7143839	104	99	97	95
7143840	102	99	98	94
Blank	102	97	98	94
LCS	102	98	98	97
MS	103	101	99	99
MSD	101	98	100	98
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13212WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7143823	98	74	102
7143824	99	73	105
7143825	96	55*	101
7143826	99	71	105
7143827	94	69	96
7143828	94	50*	103
7143829	106	87	109
7143830	103	77	105
7143831	100	77	108
7143832	94	61*	98
7143833	102	75	104
7143834	96	80	101
7143835	57*	54*	99
7143836	92	74	99
7143837	100	70	105
7143838	101	97	101
7143839	101	81	107
Blank	100	100	108
LCS	100	98	107

*- Outside of specification

**.-This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil
Reported: 08/06/13 at 08:40 AM

Group Number: 1407682

Surrogate Quality Control

LCSD	101	100	108
Limits:	64-120	62-141	58-134

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1407684 Sample # 7143866-82

Instructions on reverse side correspond with circled numbers.

1 of 2

1 Client Information				4 Matrix		5 Analyses Requested										6 Remarks											
Facility #/SID <u>Mayflower Pipeline Incident</u>				☐ Sediment ☐ Potable ☐ Ground ☒ Surface ☐ NPDES ☐ Air ☐ Oil ☐ Water		Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other											
Site Address <u>Mayflower, AR</u>						<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>VOCs</td><td>B260 B</td></tr> <tr><td>PAHs</td><td>B270 SIM</td></tr> <tr><td>PCRA Metals</td><td>VN₁ Cd, Mg</td></tr> <tr><td>Diss Metals</td><td></td></tr> <tr><td>HEM Oil & Grease</td><td></td></tr> </table>												VOCs	B260 B	PAHs	B270 SIM	PCRA Metals	VN ₁ Cd, Mg	Diss Metals		HEM Oil & Grease	
VOCs	B260 B																										
PAHs	B270 SIM																										
PCRA Metals	VN ₁ Cd, Mg																										
Diss Metals																											
HEM Oil & Grease																											
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE																									
Consultant/Office <u>Arcaadis</u>		Consultant Phone # <u>919 202 6779</u>																									
Consultant PM <u>Steve Barrick</u>																* Lab to filter and preserve diss metals upon receipt											
Sampler <u>H. Van Aller / J. Waldron</u>																											
2 Sample Identification																											
Collected																											
Date		Time		Grab		Composite																					
<u>WS-014(1.5-2.0)072913</u>		<u>7/24/13</u>		<u>820</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-014(5.5-6.0)072913</u>		<u>830</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-012(1.5-2.0)072913</u>		<u>850</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-012(5.0-5.5)072913</u>		<u>900</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-010(1.5-2.0)072913</u>		<u>920</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-010(3.5-4.0)072913</u>		<u>930</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-005(Sur Face) 072913</u>		<u>950</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-011(1.5-2.0)072913</u>		<u>1020</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-011(5.0-5.5)072913</u>		<u>1030</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-003(Sur Face)072913</u>		<u>1040</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-018(Sur Face)072913</u>		<u>1050</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
<u>WS-002(Sur Face)072913</u>		<u>1120</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>		<u>X</u>													
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>H. Van Aller</u>		Date <u>7/29/13</u>		Time <u>1500</u>		Received by		Date		Time		9											
Standard <u>5 day</u> 4 day																											
72 hour 48 hour 24 hour																											
8 Data Package (circle if required)				Relinquished by		Date		Time		Received by		Date		Time													
Type I - Full																											
Type VI (Raw Data)																											
NJ Reduced																											
Other _____																											
EDD (circle if required)				Relinquished by Commercial Carrier		Date		Time		Received by		Date		Time													
Locus EIM (default)																											
Other _____																											
				UPS _____		FedEx <u>X</u>		Other _____		<u>Deborah Neal</u>		<u>7/30/13</u>		<u>0925</u>													
				Temperature Upon Receipt <u>0.6-4.4 °C</u>						Custody Seals Intact? <u>Yes</u>																	

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

7053 0713

Issued by Dept. 40 Management
7053 0413

Environmental Sample Administration
Receipt Documentation Log

1407684

Client/Project: XOM mayflowerShipping Container Sealed: YES NODate of Receipt: 7/30/13Custody Seal Present * : YES NOTime of Receipt: 0925* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 50-1Package: 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	1.2	TB	WI	Y	B	
2	↓	3.1	↓	↓	↓	↓	
3	↓	0.8	↓	↓	↓	↓	
4	↓	4.4	↓	↓	↓	↓	
5	↓	0.6	↓	↓	↓	↓	
6	↓	0.8	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

1 vial for WS-012 (5.0-5.5) rec'd broken @ EUE
Gr. 1407684

Unpacker Signature/Emp#:

D. Neslund / 208

Date/Time:

7/30/13/1015

Issued by Dept. 6042 Management

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 <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but $\geq$ 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.

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