

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

April 20, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 04/19/2013

Group Number: 1384143

SDG: PEG45

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(SURFACE)041813 Grab Surface Water	7027995
WS-002(SURFACE)041813 Grab Surface Water	7027996
WS-BKG-001(SURFACE)041813 Grab Surface Water	7027997
WS-005(SURFACE)041813 Grab Surface Water	7027998
WS-005(SURFACE)MS041813 Grab Surface Water	7027999
WS-005(SURFACE)MSD041813 Grab Surface Water	7028000
WS-005(SURFACE)DUP041813 Grab Surface Water	7028001
WS-008(SURFACE)041813 Grab Surface Water	7028002
WS-007(SURFACE)041813 Grab Surface Water	7028003
WS-007(0.5-1.0)041813 Grab Surface Water	7028004
WS-006(SURFACE)041813 Grab Surface Water	7028005
WS-006(0.5-1.0)041813 Grab Surface Water	7028006
WS-001(SURFACE)041813 Grab Surface Water	7028007
WS-001(0.5-1.0)041813 Grab Surface Water	7028008
WS-004(SURFACE)041813 Grab Surface Water	7028009
WS-004(0.5-1.0)041813 Grab Surface Water	7028010
WS-TB-15-041813 Water	7028011

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

ELECTRONIC ARCADIS

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ELECTRONIC ExxonMobil

COPY TO

Attn: Stephen Barrick

Attn: Lyndi Mott

Attn: Scott Bushroe

ELECTRONIC COPY TO	ExxonMobil Pipeline Company	Attn: Timothy S. Martin
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1384143

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:**SW-846 8260B 25mL purge, GC/MS Volatiles**

Batch #: C131091AA (Sample number(s): 7027995-7028000, 7028002-7028011 UNSPK: 7027998)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,2-Dichlorobenzene

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13109WAB026 (Sample number(s): 7027995-7028000, 7028002-7028010 UNSPK: 7027998)

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

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7028000, 7028004, 7028007, 7028008, 7028010, MSD

Sample #s: 7028000, 7028004, 7028007, 7028008, 7028010

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.

SW-846 6010B, Metals

Batch #: 131091848001 (Sample number(s): 7027995-7028010 UNSPK: 7027998 BKG: 7027998)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Chromium

Sample Description: WS-003 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027995
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18003 SDG#: PEG45-01

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-003 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027995
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18003 SDG#: PEG45-01

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	0.052	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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0261	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.36	0.0640	0.200	1

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

Sample Description: WS-003 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027995
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18003 SDG#: PEG45-01

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	
07051	Chromium	7440-47-3	0.0015 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.71	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0025 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 14:44	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 14:44	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/19/2013 21:57	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:19	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-002 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027996
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:45 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18002 SDG#: PEG45-02

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-002 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027996
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18002 SDG#: PEG45-02

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	13.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0166	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	2.83	0.0640	0.200	1

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

Sample Description: WS-002 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027996
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 09:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18002 SDG#: PEG45-02

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	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.44	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 15:06	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 15:06	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/19/2013 22:24	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:22	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-BKG-001(SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027997
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:15 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18BKG SDG#: PEG45-03

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-BKG-001(SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027997
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:15 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18BKG SDG#: PEG45-03

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	0.2 J	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	0.014 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	29.0	0.064	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	0.0381	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.00	0.0640	0.200	1

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

Sample Description: WS-BKG-001(SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027997
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18BKG SDG#: PEG45-03

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	
07051	Chromium	7440-47-3	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.20	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0030 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 15:28	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 15:28	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/19/2013 22:52	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:33	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-005(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027998
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:40 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04BKG

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-005(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027998
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:40 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04BKG

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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.9	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0242	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.57	0.0640	0.200	1

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

Sample Description: WS-005(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027998
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18005 SDG#: PEG45-04BKG

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	0.0013 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.70	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0022 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 13:38	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 13:38	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/19/2013 23:19	Mark A Clark	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 16:57	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-005(SURFACE)MS041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027999
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:45 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04MS

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	43	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.5	0.1	0.5	1
02898	Benzene	71-43-2	5.3	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.4	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.6	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.5	0.1	0.5	1
02898	Bromoform	75-25-2	5.7	0.1	0.5	1
02898	Bromomethane	74-83-9	5.5	0.1	0.5	1
02898	2-Butanone	78-93-3	45	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.5	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.5	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.4	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.8	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.7	0.1	0.5	1
02898	Chloroethane	75-00-3	5.4	0.1	0.5	1
02898	Chloroform	67-66-3	5.7	0.1	0.5	1
02898	Chloromethane	74-87-3	5.0	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.5	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.5	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	6.2	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.6	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.5	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.6	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.7	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.6	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.6	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.4	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.5	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.6	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.6	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.5	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.7	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.5	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.4	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.9	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.4	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.4	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.0	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.0	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.6	0.1	0.5	1
02898	Freon 113	76-13-1	5.9	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.6	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.6	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.6	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.9	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	28	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.6	0.2	0.5	1

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

Sample Description: WS-005(SURFACE)MS041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027999
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:45 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04MS

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	5.5	0.1	0.5	1
02898	Styrene	100-42-5	5.7	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.8	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.8	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.7	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.9	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.6	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.8	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.5	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.0	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.8	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.5	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.5	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.5	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.98	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.051	1
08357	Anthracene	120-12-7	0.87	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.93	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.85	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	1.0	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.86	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.97	0.010	0.051	1
08357	Chrysene	218-01-9	0.86	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.83	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.87	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.0	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.0	0.030	0.051	1
08357	Pyrene	129-00-0	1.1	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	34.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.15	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0520	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.71	0.0640	0.200	1

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

Sample Description: WS-005(SURFACE)MS041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7027999
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18005 SDG#: PEG45-04MS

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	0.211	0.0011	0.0150	1
07055	Lead	7439-92-1	0.159	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.77	0.0606	0.100	1
07061	Nickel	7440-02-0	0.535	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.151	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0499	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.538	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000070	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	C131091AA	04/19/2013 14:00	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 14:00	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/19/2013 23:47	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:07	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-005(SURFACE)MSD041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028000
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:50 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04MSD

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	43	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.7	0.1	0.5	1
02898	Benzene	71-43-2	5.4	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.6	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.6	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.7	0.1	0.5	1
02898	Bromoform	75-25-2	5.9	0.1	0.5	1
02898	Bromomethane	74-83-9	5.6	0.1	0.5	1
02898	2-Butanone	78-93-3	44	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.7	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.7	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.7	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.8	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.9	0.1	0.5	1
02898	Chloroethane	75-00-3	5.5	0.1	0.5	1
02898	Chloroform	67-66-3	5.8	0.1	0.5	1
02898	Chloromethane	74-87-3	5.3	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.7	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.6	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	6.2	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.8	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.8	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.7	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.9	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.9	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.8	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.4	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.7	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.7	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.6	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.8	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.7	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.6	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.0	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.5	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.2	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.0	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.7	0.1	0.5	1
02898	Freon 113	76-13-1	5.8	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.8	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.8	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.8	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.1	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	29	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.6	0.2	0.5	1

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

Sample Description: WS-005(SURFACE)MSD041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028000
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:50 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18005 SDG#: PEG45-04MSD

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	5.7	0.1	0.5	1
02898	Styrene	100-42-5	6.0	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	6.0	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	6.0	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.8	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.6	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	6.1	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.8	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.8	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.9	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.6	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.0	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.8	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.6	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.7	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.7	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.011	0.053	1
08357	Acenaphthylene	208-96-8	1.0	0.011	0.053	1
08357	Anthracene	120-12-7	0.84	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.82	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.59	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.70	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.54	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.68	0.011	0.053	1
08357	Chrysene	218-01-9	0.74	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	0.52	0.011	0.053	1
08357	Fluoranthene	206-44-0	1.0	0.011	0.053	1
08357	Fluorene	86-73-7	1.0	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.54	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.011	0.053	1
08357	Naphthalene	91-20-3	1.1	0.032	0.053	1
08357	Phenanthrene	85-01-8	1.0	0.032	0.053	1
08357	Pyrene	129-00-0	1.0	0.011	0.053	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	34.5	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1

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

Sample Description: WS-005 (SURFACE) MSD041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028000
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:50 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18005 SDG#: PEG45-04MSD

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	
07049	Cadmium	7440-43-9	0.0511	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.73	0.0640	0.200	1
07051	Chromium	7440-47-3	0.206	0.0011	0.0150	1
07055	Lead	7439-92-1	0.157	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.69	0.0606	0.100	1
07061	Nickel	7440-02-0	0.525	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.148	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0486	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.528	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000070	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	C131091AA	04/19/2013 14:22	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 14:22	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 00:15	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:11	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-005 (SURFACE) DUP041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028001
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 10:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18005 SDG#: PEG45-04DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	15.6	0.064	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	0.0244	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.49	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.68	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0022 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-008(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028002
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 11:20 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18008 SDG#: PEG45-05

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	5.1	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	2.3	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	0.5 J	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	2.2	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	0.3 J	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-008 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028002
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 11:20 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18008 SDG#: PEG45-05

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	2.5	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	0.2 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	0.1 J	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	1.9	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	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.011 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.016 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.013 J	0.010	0.051	1
08357	Fluorene	86-73-7	0.021 J	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	0.022 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.020 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.032 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.029 J	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	31.9	0.064	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	0.0524	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.49	0.0640	0.200	1

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

Sample Description: WS-008 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028002
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 11:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18008 SDG#: PEG45-05

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	
07051	Chromium	7440-47-3	0.0060 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.20	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0054 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0080	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 15:50	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 15:50	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 00:42	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:37	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-007(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028003
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18007 SDG#: PEG45-06

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	24	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	1.0 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(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028003
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18007 SDG#: PEG45-06

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	0.014 J	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.012 J	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	0.024 J	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.012 J	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.011 J	0.011	0.053	1
08357	Chrysene	218-01-9	0.022 J	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	0.032 J	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	0.012 J	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.011 J	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	0.039 J	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0093 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0839	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.17	0.0640	0.200	1

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

Sample Description: WS-007 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028003
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18007 SDG#: PEG45-06

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	
07051	Chromium	7440-47-3	0.0076 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.57	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0069 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0111	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 16:12	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 16:12	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 01:10	Mark A Clark	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:40	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028004
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:10 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18007 SDG#: PEG45-07

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	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	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)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028004
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:10 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18007 SDG#: PEG45-07

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.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	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	0.019 J	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.012 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.013 J	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.022 J	0.010	0.052	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	28.9	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0096 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.160	0.00033	0.0050	1

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

Sample Description: WS-007(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028004
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18007 SDG#: PEG45-07

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.41	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0203	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0174	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.72	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0156	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0308	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 16:34	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 16:34	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 01:37	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:44	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-006 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028005
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:25 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18061 SDG#: PEG45-08

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-006 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028005
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:25 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18061 SDG#: PEG45-08

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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.4	0.064	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.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.95	0.0640	0.200	1

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

Sample Description: WS-006 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028005
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:25 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18061 SDG#: PEG45-08

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	
07051	Chromium	7440-47-3	0.0020 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.84	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0025 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 16:56	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 16:56	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 02:05	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:47	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 04:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028006
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:30 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18062 SDG#: PEG45-09

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-006(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028006
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:30 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18062 SDG#: PEG45-09

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.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0075 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0266	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.05	0.0640	0.200	1

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

Sample Description: WS-006(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028006
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18062 SDG#: PEG45-09

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	
07051	Chromium	7440-47-3	0.0015 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.87	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0028 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 17:18	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 17:18	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 02:32	Mark A Clark	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:51	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 05:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-001(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028007
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:45 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18011 SDG#: PEG45-10

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-001(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028007
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18011 SDG#: PEG45-10

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	0.052	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 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	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	16.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0520	0.00033	0.0050	1

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

Sample Description: WS-001(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028007
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18011 SDG#: PEG45-10

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.46	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0062 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.99	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0037 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0084	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 17:40	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 17:40	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 03:00	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:55	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 05:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028008
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:50 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18012 SDG#: PEG45-11

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-001(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028008
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:50 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18012 SDG#: PEG45-11

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	0.8	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	0.4 J	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	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.012 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.017 J	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO ₃	471-34-1	33.7	0.064	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	0.173	0.00033	0.0050	1

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

Sample Description: WS-001(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028008
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 14:50 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18012 SDG#: PEG45-11

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.01	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0213	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0181	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.93	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0166	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0322	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 18:03	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 18:03	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 03:27	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 17:58	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 05:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-004(SURFACE)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028009
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18041 SDG#: PEG45-12

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-004 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028009
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18041 SDG#: PEG45-12

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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0457	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.46	0.0640	0.200	1

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

Sample Description: WS-004 (SURFACE) 041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028009
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18041 SDG#: PEG45-12

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	
07051	Chromium	7440-47-3	0.0043 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.88	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0027 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0063	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 18:25	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 18:25	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 03:55	Mark A Clark	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 18:02	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 05:06	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-004(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028010
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:15 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18042 SDG#: PEG45-13

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	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-004(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028010
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:15 by JL

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18042 SDG#: PEG45-13

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	0.8	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	0.3 J	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	0.013 J	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	35.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0089 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.180	0.00033	0.0050	1

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

Sample Description: WS-004(0.5-1.0)041813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028010
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013 15:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/19/2013 09:35

PO Box 4416

Reported: 04/20/2013 11:25

Houston TX 77210-4416

18042 SDG#: PEG45-13

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.27	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0243	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0192	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.18	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0178	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0356	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	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	C131091AA	04/19/2013 18:47	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 18:47	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13109WAB026	04/20/2013 04:22	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13109WAB026	04/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131106256001	04/20/2013 05:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131091848001	04/19/2013 18:06	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131095713001	04/20/2013 05:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131091848001	04/19/2013 11:00	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131095713001	04/19/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-TB-15-041813 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028011
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18T15 SDG#: PEG45-14TB*

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-15-041813 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7028011
LLI Group # 1384143
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/18/2013

ExxonMobil

Submitted: 04/19/2013 09:35

Mobil Pipeline Company

Reported: 04/20/2013 11:25

PO Box 4416

Houston TX 77210-4416

18T15 SDG#: PEG45-14TB*

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	C131091AA	04/19/2013 13:16	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131091AA	04/19/2013 13:16	Kerri E Legerlotz	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 04/20/13 at 11:25 AM

Group Number: 1384143

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: C131091AA	Sample number(s): 7027995-7028000, 7028002-7028011								
Acetone	N.D.	3.0	5.0	ug/l	99		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	99		61-130		
Benzene	N.D.	0.1	0.5	ug/l	100		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	101		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	98		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	93		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	99		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	115		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	107		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	96		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	105		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	91		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	99		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	118		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	98		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	96		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	99		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	100		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	99		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	94		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	102		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	105		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	105		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	120		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	96		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	110		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	99		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	96		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	87		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	81		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	109		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	104		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: 1384143

Reported: 04/20/13 at 11:25 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	100		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	91		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	106		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Styrene	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	95		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	115		65-131		
Toluene	N.D.	0.1	0.5	ug/l	99		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	104		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	99		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	107		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	99		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	105		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	93		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	96		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	99		80-120		

Batch number: 13109WAB026

Sample number(s): 7027995-7028000, 7028002-7028010

Acenaphthene	N.D.	0.010	0.050	ug/l	97		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	100		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	99		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	100		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	100		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	108		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	101		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	107		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	106		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	99		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	108		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	100		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	100		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	102		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	101		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	101		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	107		71-116		

Batch number: 131091848001

Sample number(s): 7027995-7028010

Arsenic	N.D.	0.0068	0.0200	mg/l	104		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	103		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	103		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	106		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	102		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	96		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	104		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: 1384143

Reported: 04/20/13 at 11:25 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: 131095713001	Sample number(s): 7027995-7028010								
Mercury	N.D.	0.00007	0.00020	mg/l	116		80-120		
		0							

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: C131091AA	Sample number(s): 7027995-7028000,7028002-7028011 UNSPK: 7027998								
Acetone	113	114	57-163	0	30				
Allyl Chloride	110	113	67-139	3	30				
Benzene	107	108	87-126	1	30				
Bromobenzene	109	112	80-123	3	30				
Bromochloromethane	113	111	82-125	1	30				
Bromodichloromethane	110	113	82-133	2	30				
Bromoform	113	119	60-138	5	30				
Bromomethane	110	111	41-145	1	30				
2-Butanone	120	118	63-146	1	30				
n-Butylbenzene	110	114	83-131	3	30				
sec-Butylbenzene	111	114	84-128	3	30				
tert-Butylbenzene	109	113	84-135	4	30				
Carbon Tetrachloride	115	115	81-148	0	30				
Chlorobenzene	114	118	78-133	3	30				
Chloroethane	108	109	70-139	1	30				
Chloroform	114	116	86-136	1	30				
Chloromethane	100	105	55-152	5	30				
2-Chlorotoluene	109	113	81-120	3	30				
4-Chlorotoluene	111	113	82-119	2	30				
1,2-Dibromo-3-chloropropane	125	123	43-143	1	30				
Dibromochloromethane	112	116	79-125	3	30				
1,2-Dibromoethane	110	115	84-127	4	30				
Dibromomethane	111	114	83-126	2	30				
1,2-Dichlorobenzene	113	118*	83-117	4	30				
1,3-Dichlorobenzene	113	117	81-118	4	30				
1,4-Dichlorobenzene	112	115	79-120	3	30				
Dichlorodifluoromethane	108	108	28-136	1	30				
1,1-Dichloroethane	111	113	88-136	2	30				
1,2-Dichloroethane	112	114	82-135	2	30				
1,1-Dichloroethene	113	114	83-150	1	30				
cis-1,2-Dichloroethene	110	112	82-129	2	30				
trans-1,2-Dichloroethene	112	112	88-127	0	30				
Dichlorofluoromethane	133	136	59-176	2	30				
1,2-Dichloropropane	109	113	91-126	3	30				
1,3-Dichloropropane	108	113	80-127	4	30				
2,2-Dichloropropane	117	119	80-134	2	30				
1,1-Dichloropropene	107	110	86-139	3	30				
cis-1,3-Dichloropropene	109	114	74-132	5	30				
trans-1,3-Dichloropropene	100	105	71-128	5	30				
Ethyl ether	80	81	67-127	1	30				

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 04/20/13 at 11:25 AM

Group Number: 1384143

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
Ethylbenzene	111	115	80-140	3	30				
Freon 113	117	115	87-158	2	30				
Hexachlorobutadiene	113	117	65-128	3	30				
Isopropylbenzene	112	116	81-133	3	30				
p-Isopropyltoluene	112	116	84-124	4	30				
Methyl Tertiary Butyl Ether	97	101	82-132	4	30				
4-Methyl-2-Pentanone	110	117	69-149	6	30				
Methylene Chloride	111	112	84-122	1	30				
n-Propylbenzene	110	114	79-131	3	30				
Styrene	114	119	63-151	4	30				
1,1,1,2-Tetrachloroethane	116	119	87-126	3	30				
1,1,2,2-Tetrachloroethane	115	119	75-131	3	30				
Tetrachloroethene	114	116	75-129	2	30				
Tetrahydrofuran	112	110	56-154	1	30				
Toluene	109	112	83-127	3	30				
1,2,3-Trichlorobenzene	118	123	73-125	4	30				
1,2,4-Trichlorobenzene	111	117	77-120	5	30				
1,1,1-Trichloroethane	116	116	85-140	0	30				
1,1,2-Trichloroethane	114	118	85-129	4	30				
Trichloroethene	110	113	85-131	2	30				
Trichlorofluoromethane	120	121	67-161	1	30				
1,2,3-Trichloropropane	115	117	76-120	1	30				
1,2,4-Trimethylbenzene	110	113	87-126	3	30				
1,3,5-Trimethylbenzene	110	114	89-129	4	30				
Vinyl Chloride	110	113	65-151	3	30				
Xylene (Total)	110	114	81-137	3	30				

Batch number: 13109WAB026 Sample number(s): 7027995-7028000,7028002-7028010 UNSPK: 7027998

Acenaphthene	96	97	59-127	5	30
Acenaphthylene	99	95	33-146	0	30
Anthracene	86	79	69-119	3	30
Benzo(a)anthracene	92	77	67-124	13	30
Benzo(a)pyrene	84	56*	64-123	36*	30
Benzo(b)fluoranthene	99	66	61-133	36*	30
Benzo(g,h,i)perylene	84	51	36-138	45*	30
Benzo(k)fluoranthene	96	64	59-128	35*	30
Chrysene	85	70	62-118	15	30
Dibenz(a,h)anthracene	82	49	32-141	46*	30
Fluoranthene	108	99	65-123	5	30
Fluorene	101	96	69-124	1	30
Indeno(1,2,3-cd)pyrene	86	51	29-143	47*	30
1-Methylnaphthalene	107	103	67-117	0	30
2-Methylnaphthalene	104	100	71-126	0	30
Naphthalene	103	99	58-131	1	30
Phenanthrene	102	95	67-117	3	30
Pyrene	104	98	59-125	1	30

Batch number: 131091848001 Sample number(s): 7027995-7028010 UNSPK: 7027998 BKG: 7027998

Arsenic	103	103	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	106	104	78-118	2	20	0.0242	0.0244	1 (1)	20
Cadmium	104	102	83-116	2	20	N.D.	N.D.	0 (1)	20
Calcium	104	104	81-118	0	20	3.57	3.49	2	20

*- 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 SummaryClient Name: ExxonMobil
Reported: 04/20/13 at 11:25 AM

Group Number: 1384143

Sample Matrix Quality ControlUnspiked (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</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Chromium	105	103	81-120	2	20	0.0013 J	0.0017 J	27* (1)	20
Lead	106	105	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	103	99	75-125	2	20	1.70	1.68	1	20
Nickel	107	105	86-115	2	20	N.D.	N.D.	0 (1)	20
Selenium	101	99	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	100	97	75-125	3	20	N.D.	N.D.	0 (1)	20
Vanadium	107	105	90-111	2	20	0.0022 J	0.0022 J	4 (1)	20

Batch number: 131095713001

Sample number(s): 7027995-7028010 UNSPK: 7027998 BKG: 7027998

Mercury 109 108 80-120 1 20 N.D. N.D. 0 (1) 20

Surrogate Quality ControlSurrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: NHDES VOCs 25ml purge

Batch number: C131091AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

7027995	102	102	97	97
7027996	102	102	98	96
7027997	103	102	98	98
7027998	104	103	97	96
7027999	102	101	99	99
7028000	101	101	99	100
7028002	101	101	99	98
7028003	102	101	98	96
7028004	102	102	97	97
7028005	102	103	97	96
7028006	103	103	97	96
7028007	103	102	98	97
7028008	102	103	98	97
7028009	102	103	98	97
7028010	103	103	98	98
7028011	103	104	98	96
Blank	102	100	97	96
LCS	100	99	100	98
MS	102	101	99	99
MSD	101	101	99	100

Limits: 77-114 74-113 77-110 78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13109WAB026

Fluoranthene-d10 Benzo(a)pyrene-d12 1-Methylnaphthalene-d10

7027995	98	82	90
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*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1384143

Reported: 04/20/13 at 11:25 AM

Surrogate Quality Control

7027996	99	85	89
7027997	100	93	93
7027998	98	87	90
7027999	101	90	94
7028000	91	57*	90
7028002	85	90	91
7028003	79	81	86
7028004	73	49*	80
7028005	94	79	87
7028006	92	78	85
7028007	74	53*	73
7028008	49*	51*	75
7028009	82	62	76
7028010	66	51*	75
Blank	104	103	93
LCS	98	100	91
MS	101	90	94
MSD	91	57*	90
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.

For Lancaster Laboratories use only
Acct. # 14739 Group # 1384143 Sample # 7027995-8011
Instructions on reverse side correspond with circled numbers.

Instructions on reverse side correspond with circled numbers

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

Issued by Dept. 40 Management
7053.01

Acct. # 14739

For Lancaster Laboratories use only
Group # 1384143 Sample # 7027995-8011
Instructions on reverse side correspond with circled numbers.

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

Issued by Dept. 40 Management
7053.01

Environmental Sample Administration
Receipt Documentation Log

1384143

Client/Project: XOM MayflowerShipping Container Sealed: YES NODate of Receipt: 4/19/13Custody Seal Present * : YES NOTime of Receipt: 0935* 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	1.9	TB	WI	Y	B	
2	↓	1.8	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Danesh / 208 Date/Time: 4/19/13 0945

Issued by Dept. 6042 Management

2174.06

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

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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