

ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

April 22, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 04/21/2013

Group Number: 1384442

SDG: PEG51

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(SURFACE)042013 Grab Surface Water	7029721
WS-003(SURFACE)MS042013 Grab Surface Water	7029722
WS-003(SURFACE)MSD042013 Grab Surface Water	7029723
WS-003(SURFACE)DUP042013 Grab Surface Water	7029724
WS-002(SURFACE)042013 Grab Surface Water	7029725
WS-BKG-001(SURFACE)042013 Grab Surface Water	7029726
WS-005(SURFACE)042013 Grab Surface Water	7029727
WS-001(SURFACE)042013 Grab Surface Water	7029728
WS-001(0.5-1.0)042013 Grab Surface Water	7029729
WS-004(SURFACE)042013 Grab Surface Water	7029730
WS-004(0.5-1.0)042013 Grab Surface Water	7029731
WS-007(SURFACE)042013 Grab Surface Water	7029732
WS-007(0.5-1.0)042013 Grab Surface Water	7029733
WS-006(SURFACE)042013 Grab Surface Water	7029734
WS-006(0.5-1.0)042013 Grab Surface Water	7029735
WS-008(SURFACE)042013 Grab Surface Water	7029736
WS-TB16-042013 Water	7029737

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

COPY TO

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 #: 1384442

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:**SW-846 8270C SIM, GC/MS Semivolatiles**

Batch #: 13111WAA026 (Sample number(s): 7029721-7029723, 7029725-7029736 UNSPK: 7029721)

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) 7029730, 7029731, 7029732, 7029733

Sample #s: 7029730, 7029731, 7029732, 7029733

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 #: 131111848001 (Sample number(s): 7029721-7029736 UNSPK: 7029721 BKG: 7029721)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Calcium, Nickel, Vanadium, Cadmium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Nickel, Vanadium

Sample Description: WS-003 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029721
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01BKG

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

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Pipeline Incident

LLI Sample # WW 7029721
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

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Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01BKG

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	0.066	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	
06256	Total Hardness as CaCO3	471-34-1	13.9	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	0.0226	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.04	0.0640	0.200	1

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

Sample Description: WS-003 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029721
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01BKG

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	1.54	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 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	0.0015 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	C131111AA	04/21/2013 17:21	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 17:21	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 02:40	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 08:20	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:02	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-003 (SURFACE) MS042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029722
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01MS

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	38	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.1	0.1	0.5	1
02898	Benzene	71-43-2	5.2	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.0	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.2	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.1	0.1	0.5	1
02898	Bromoform	75-25-2	5.0	0.1	0.5	1
02898	Bromomethane	74-83-9	4.9	0.1	0.5	1
02898	2-Butanone	78-93-3	38	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.2	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.3	0.1	0.5	1
02898	Chloroethane	75-00-3	4.8	0.1	0.5	1
02898	Chloroform	67-66-3	5.4	0.1	0.5	1
02898	Chloromethane	74-87-3	4.4	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.1	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.1	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.1	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.0	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.2	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.1	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.2	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.1	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.5	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.4	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.3	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	5.3	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.5	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.0	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.2	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.9	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.7	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.3	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.1	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.6	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.4	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.2	0.1	0.5	1
02898	Freon 113	76-13-1	5.8	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.3	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.2	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.2	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.6	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	23	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.5	0.2	0.5	1

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

Sample Description: WS-003 (SURFACE) MS042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029722
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01MS

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	5.2	0.1	0.5	1
02898	Styrene	100-42-5	5.3	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.3	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.9	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.5	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	25	2.0	5.0	1
02898	Toluene	108-88-3	5.1	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.1	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.0	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.2	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.3	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.3	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.0	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.0	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.1	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.8	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.1	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.052	1
08357	Anthracene	120-12-7	1.0	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	1.0	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	1.1	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.99	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	1.1	0.010	0.052	1
08357	Chrysene	218-01-9	1.1	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	1.0	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.1	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	1.0	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.2	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.052	1
08357	Naphthalene	91-20-3	1.2	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	1.2	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	36.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.174	0.0068	0.0200	1
07046	Barium	7440-39-3	2.28	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0586	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.01	0.0640	0.200	1

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

Sample Description: WS-003 (SURFACE) MS042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029722
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals			mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.231	0.0011	0.0150	1
07055	Lead	7439-92-1	0.176	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.99	0.0606	0.100	1
07061	Nickel	7440-02-0	0.596	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.169	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0553	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.583	0.0013	0.0050	1
SW-846 6010B			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000070	0.00020	1
SW-846 7470A			mg/l	mg/l	mg/l	

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	C131111AA	04/21/2013 17:43	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 17:43	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 03:07	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:16	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-003 (SURFACE) MSD042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029723
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Submitted: 04/21/2013 11:11

Mobil Pipeline Company

Reported: 04/22/2013 13:19

PO Box 4416

Houston TX 77210-4416

20003 SDG#: PEG51-01MSD

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	37	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	5.1	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.5	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.0	0.1	0.5	1
02898	Bromoform	75-25-2	4.9	0.1	0.5	1
02898	Bromomethane	74-83-9	5.3	0.1	0.5	1
02898	2-Butanone	78-93-3	37	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.2	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.2	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.3	0.1	0.5	1
02898	Chloroethane	75-00-3	5.3	0.1	0.5	1
02898	Chloroform	67-66-3	5.4	0.1	0.5	1
02898	Chloromethane	74-87-3	4.7	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.1	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.1	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.9	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.0	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.2	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.2	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.2	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.2	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.7	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	5.3	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	5.4	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.5	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.6	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.2	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.0	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.8	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.3	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.2	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.7	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.2	0.1	0.5	1
02898	Freon 113	76-13-1	5.7	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.3	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.3	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.2	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.7	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	24	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.5	0.2	0.5	1

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

Sample Description: WS-003 (SURFACE) MSD042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029723
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01MSD

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	5.1	0.1	0.5	1
02898	Styrene	100-42-5	5.3	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.2	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.0	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.5	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	24	2.0	5.0	1
02898	Toluene	108-88-3	5.2	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.3	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.2	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.1	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.3	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.8	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.8	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.1	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.1	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.2	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	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	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	1.0	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.96	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.73	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.83	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.64	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.78	0.010	0.051	1
08357	Chrysene	218-01-9	0.90	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.63	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.0	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.64	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	1.1	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	36.9	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.173	0.0068	0.0200	1
07046	Barium	7440-39-3	2.29	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0580	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.11	0.0640	0.200	1

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

Sample Description: WS-003 (SURFACE)MSD042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029723
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01MSD

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	0.232	0.0011	0.0150	1
07055	Lead	7439-92-1	0.174	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.03	0.0606	0.100	1
07061	Nickel	7440-02-0	0.590	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.170	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0555	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.584	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0010	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	C131111AA	04/21/2013 18:06	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 18:06	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 03:35	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:21	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-003 (SURFACE) DUP042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029724
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20003 SDG#: PEG51-01DUP

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	16.0	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	0.0251	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	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	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
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 08:28	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:11	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-002 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029725
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20002 SDG#: PEG51-02

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) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029725
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20002 SDG#: PEG51-02

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	0.037 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	14.8	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	0.0193	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.27	0.0640	0.200	1

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

Sample Description: WS-002 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029725
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 08:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20002 SDG#: PEG51-02

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	1.61	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0021 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 VOCs 8260	SW-846 8260B 25mL purge	1	C131111AA	04/21/2013 18:28	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 18:28	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 04:02	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 08:36	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:30	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-BKG-001(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029726
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20BKG SDG#: PEG51-03

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) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029726
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20BKG SDG#: PEG51-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	21.2	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	0.0333	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.57	0.0640	0.200	1

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

Sample Description: WS-BKG-001(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029726
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20BKG SDG#: PEG51-03

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	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0020 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	C131111AA	04/21/2013 18:50	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 18:50	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 04:29	Brian K Graham	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 08:40	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:34	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-005(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029727
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20005 SDG#: PEG51-04

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

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

Sample Description: WS-005(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029727
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20005 SDG#: PEG51-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.035 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	14.0	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	0.0168	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00071 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.14	0.0640	0.200	1

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

Sample Description: WS-005(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029727
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20005 SDG#: PEG51-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
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	1.50	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0022 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	C131111AA	04/21/2013 19:12	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 19:12	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 04:56	Brian K Graham	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:48	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-001(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029728
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:50 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20011 SDG#: PEG51-05

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

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

Sample Description: WS-001(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029728
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:50 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20011 SDG#: PEG51-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.033 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
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	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0467	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00083 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.77	0.0640	0.200	1

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

Sample Description: WS-001(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029728
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:50 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20011 SDG#: PEG51-05

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	0.0051 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.02	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0045 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	C131111AA	04/21/2013 19:35	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 19:35	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 05:24	Brian K Graham	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:53	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029729
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:55 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20012 SDG#: PEG51-06

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

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

Sample Description: WS-001(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029729
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:55 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20012 SDG#: PEG51-06

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	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	0.060	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		
06256	Total Hardness as CaCO ₃	471-34-1	17.8	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	0.0507	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00065 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.74	0.0640	0.200	1

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

Sample Description: WS-001(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029729
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 09:55 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20012 SDG#: PEG51-06

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	0.0048 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.06	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0043 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	0.0079	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	C131111AA	04/21/2013 19:57	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 19:57	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 05:51	Brian K Graham	1
10470	BNH Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 05:57	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-004(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029730
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20041 SDG#: PEG51-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	3.5 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-004(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029730
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20041 SDG#: PEG51-07

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	0.5 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	0.8	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	0.015 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	38.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0098 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.282	0.00033	0.0050	1

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

Sample Description: WS-004 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029730
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20041 SDG#: PEG51-07

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	0.00098 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.91	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0332	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0317	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.19	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0271	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	0.0523	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00011 J	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	C131111AA	04/21/2013 20:20	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 20:20	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 06:18	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:02	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029731
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:25 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20042 SDG#: PEG51-08

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

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

Sample Description: WS-004(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029731
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:25 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20042 SDG#: PEG51-08

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	0.3 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	0.2 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	0.5 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	1.1	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	0.011 J	0.011	0.053	1
08357	Naphthalene	91-20-3	0.081	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.017 J	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	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	43.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0155 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.322	0.00033	0.0050	1

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

Sample Description: WS-004(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029731
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:25 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20042 SDG#: PEG51-08

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	
07049	Cadmium	7440-43-9	0.00099 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.16	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0373	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0399	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.68	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0305	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	0.0586	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00013 J	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	C131111AA	04/21/2013 20:41	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 20:41	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 06:45	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:07	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-007 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029732
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20071 SDG#: PEG51-09

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-007(SURFACE)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029732
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20071 SDG#: PEG51-09

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	0.2 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	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	0.026 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.050 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.026 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.11	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.022 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.035 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.12	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	0.35	0.010	0.051	1
08357	Fluorene	86-73-7	0.011 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.028 J	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.013 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.093	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.066	0.030	0.051	1
08357	Pyrene	129-00-0	0.26	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	39.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0122 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.280	0.00033	0.0050	1

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

Sample Description: WS-007 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029732
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20071 SDG#: PEG51-09

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	
07049	Cadmium	7440-43-9	0.0012 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.79	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0349	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0284	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.50	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0288	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	0.0537	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00013 J	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	C131111AA	04/21/2013 21:04	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 21:04	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 07:12	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:11	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029733
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:45 by JL

ExxonMobil

Submitted: 04/21/2013 11:11

Mobil Pipeline Company

Reported: 04/22/2013 13:19

PO Box 4416

Houston TX 77210-4416

20072 SDG#: PEG51-10

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-007(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029733
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20072 SDG#: PEG51-10

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	0.5 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	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	0.015 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	0.022 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.045 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.011 J	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.043 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 CaCO3	471-34-1	37.2	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0125 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.271	0.00033	0.0050	1

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

Sample Description: WS-007(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029733
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20072 SDG#: PEG51-10

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	0.00090 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.54	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0311	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0264	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.07	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0253	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	0.0480	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00012 J	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	C131111AA	04/21/2013 21:26	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 21:26	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 07:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:16	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 10:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-006 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029734
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20061 SDG#: PEG51-11

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-006 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029734
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20061 SDG#: PEG51-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.043 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.7	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	0.0465	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00074 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.78	0.0640	0.200	1

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

Sample Description: WS-006 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029734
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20061 SDG#: PEG51-11

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	
07051	Chromium	7440-47-3	0.0035 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.00	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0034 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	0.0060	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 VOCs 8260	SW-846 8260B 25mL purge	1	C131111AA	04/21/2013 21:48	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 21:48	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 08:07	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:20	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 11:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029735
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20062 SDG#: PEG51-12

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-006(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029735
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20062 SDG#: PEG51-12

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.045 J	0.031	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 CaCO3	471-34-1	25.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0079 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0693	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00058 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.92	0.0640	0.200	1

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

Sample Description: WS-006(0.5-1.0)042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029735
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 11:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20062 SDG#: PEG51-12

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	0.0027 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.48	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0036 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	0.0043 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	C131111AA	04/21/2013 22:11	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 22:11	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 08:34	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:25	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 11:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-008 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029736
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 13:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20081 SDG#: PEG51-13

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	0.8	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	0.2 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	1	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	0.1 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) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029736
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 13:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20081 SDG#: PEG51-13

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	1	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	1.5	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	0.025 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	0.031 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.027 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.047 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.020 J	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	22.9	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	0.0576	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00067 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.69	0.0640	0.200	1

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

Sample Description: WS-008 (SURFACE) 042013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029736
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013 13:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/21/2013 11:11

PO Box 4416

Reported: 04/22/2013 13:19

Houston TX 77210-4416

20081 SDG#: PEG51-13

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	
07051	Chromium	7440-47-3	0.0061 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.73	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0061 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	0.0099	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 VOCs 8260	SW-846 8260B 25mL purge	1	C131111AA	04/21/2013 22:33	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 22:33	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13111WAA026	04/22/2013 09:01	Brian K Graham	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13111WAA026	04/21/2013 16:20	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131126256010	04/22/2013 10:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131111848001	04/22/2013 06:29	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131125713001	04/22/2013 11:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131111848001	04/21/2013 20:15	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131125713001	04/22/2013 06:30	Damary Valentin	1

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

Sample Description: WS-TB16-042013 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029737
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013

ExxonMobil

Submitted: 04/21/2013 11:11

Mobil Pipeline Company

Reported: 04/22/2013 13:19

PO Box 4416

Houston TX 77210-4416

20T16 SDG#: PEG51-14TB*

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-TB16-042013 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7029737
LLI Group # 1384442
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/20/2013

ExxonMobil

Submitted: 04/21/2013 11:11

Mobil Pipeline Company

Reported: 04/22/2013 13:19

PO Box 4416

Houston TX 77210-4416

20T16 SDG#: PEG51-14TB*

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	C131111AA	04/21/2013 16:59	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131111AA	04/21/2013 16:59	Sara E Johnson	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 04/22/13 at 01:19 PM

Group Number: 1384442

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: C131111AA	Sample number(s): 7029721-7029723, 7029725-7029737								
Acetone	N.D.	3.0	5.0	ug/l	112		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	97		61-130		
Benzene	N.D.	0.1	0.5	ug/l	98		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	104		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	99		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	100		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	101		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	122		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	102		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	99		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	102		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	88		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	120		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	99		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	99		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	101		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	100		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	85		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	123		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	98		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	106		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	96		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	100		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	93		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	111		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	102		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	99		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: 1384442

Reported: 04/22/13 at 01:19 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	97		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	93		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	94		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	105		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Styrene	N.D.	0.1	0.5	ug/l	100		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	100		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	121		65-131		
Toluene	N.D.	0.1	0.5	ug/l	96		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	105		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	102		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	103		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	99		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	104		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	100		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	95		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	98		80-120		

Batch number: 13111WAA026

Sample number(s): 7029721-7029723, 7029725-7029736

Acenaphthene	N.D.	0.010	0.050	ug/l	103		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	109		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	107		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	109		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	109		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	116		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	109		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	111		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	111		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	109		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	106		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	105		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	108		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	111		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	108		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	107		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	105		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	114		71-116		

Batch number: 131111848001

Sample number(s): 7029721-7029736

Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	0.0010 J	0.00033	0.0050	mg/l	98		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	104		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	98		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	100		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	103		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	98		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	98		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	96		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	101		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: 1384442

Reported: 04/22/13 at 01:19 PM

<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: 131125713001	Sample number(s): 7029721-7029736								
Mercury	N.D.	0.00007	0.00020	mg/l	100		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: C131111AA	Sample number(s): 7029721-7029723, 7029725-7029737 UNSPK: 7029721								
Acetone	100	97	57-163	3	30				
Allyl Chloride	102	109	67-139	7	30				
Benzene	104	105	87-126	1	30				
Bromobenzene	101	101	80-123	0	30				
Bromochloromethane	104	109	82-125	4	30				
Bromodichloromethane	101	101	82-133	0	30				
Bromoform	100	98	60-138	2	30				
Bromomethane	98	106	41-145	8	30				
2-Butanone	102	99	63-146	3	30				
n-Butylbenzene	104	104	83-131	0	30				
sec-Butylbenzene	103	104	84-128	1	30				
tert-Butylbenzene	102	103	84-135	1	30				
Carbon Tetrachloride	113	113	81-148	0	30				
Chlorobenzene	106	106	78-133	1	30				
Chloroethane	96	106	70-139	10	30				
Chloroform	108	109	86-136	1	30				
Chloromethane	87	94	55-152	8	30				
2-Chlorotoluene	101	101	81-120	0	30				
4-Chlorotoluene	102	102	82-119	0	30				
1,2-Dibromo-3-chloropropane	102	98	43-143	4	30				
Dibromochloromethane	101	100	79-125	0	30				
1,2-Dibromoethane	99	101	84-127	2	30				
Dibromomethane	103	103	83-126	0	30				
1,2-Dichlorobenzene	103	104	83-117	1	30				
1,3-Dichlorobenzene	104	104	81-118	0	30				
1,4-Dichlorobenzene	103	104	79-120	1	30				
Dichlorodifluoromethane	90	94	28-136	5	30				
1,1-Dichloroethane	108	109	88-136	1	30				
1,2-Dichloroethane	105	106	82-135	0	30				
1,1-Dichloroethene	113	114	83-150	0	30				
cis-1,2-Dichloroethene	107	107	82-129	0	30				
trans-1,2-Dichloroethene	110	110	88-127	0	30				
Dichlorofluoromethane	120	131	59-176	9	30				
1,2-Dichloropropane	104	105	91-126	1	30				
1,3-Dichloropropane	99	99	80-127	0	30				
2,2-Dichloropropane	115	116	80-134	1	30				
1,1-Dichloropropene	107	107	86-139	0	30				
cis-1,3-Dichloropropene	103	104	74-132	1	30				
trans-1,3-Dichloropropene	93	94	71-128	2	30				
Ethyl ether	107	107	67-127	0	30				

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 04/22/13 at 01:19 PM

Group Number: 1384442

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	103	104	80-140	1	30				
Freon 113	116	115	87-158	1	30				
Hexachlorobutadiene	106	106	65-128	0	30				
Isopropylbenzene	105	106	81-133	1	30				
p-Isopropyltoluene	104	104	84-124	0	30				
Methyl Tertiary Butyl Ether	93	94	82-132	2	30				
4-Methyl-2-Pentanone	92	95	69-149	3	30				
Methylene Chloride	110	110	84-122	0	30				
n-Propylbenzene	104	103	79-131	1	30				
Styrene	105	106	63-151	1	30				
1,1,1,2-Tetrachloroethane	106	105	87-126	1	30				
1,1,2,2-Tetrachloroethane	98	100	75-131	1	30				
Tetrachloroethene	110	109	75-129	1	30				
Tetrahydrofuran	100	96	56-154	4	30				
Toluene	103	104	83-127	1	30				
1,2,3-Trichlorobenzene	103	106	73-125	4	30				
1,2,4-Trichlorobenzene	100	103	77-120	3	30				
1,1,1-Trichloroethane	113	111	85-140	1	30				
1,1,2-Trichloroethane	104	103	85-129	1	30				
Trichloroethene	106	107	85-131	0	30				
Trichlorofluoromethane	107	116	67-161	8	30				
1,2,3-Trichloropropane	100	97	76-120	3	30				
1,2,4-Trimethylbenzene	101	101	87-126	1	30				
1,3,5-Trimethylbenzene	101	102	89-129	1	30				
Vinyl Chloride	96	104	65-151	8	30				
Xylene (Total)	104	104	81-137	0	30				

Batch number: 13111WAA026 Sample number(s): 7029721-7029723,7029725-7029736 UNSPK: 7029721

Acenaphthene	102	99	59-127	5	30
Acenaphthylene	109	106	33-146	5	30
Anthracene	100	99	69-119	4	30
Benzo(a)anthracene	109	94	67-124	16	30
Benzo(a)pyrene	97	72	64-123	32*	30
Benzo(b)fluoranthene	110	81	61-133	33*	30
Benzo(g,h,i)perylene	96	63	36-138	43*	30
Benzo(k)fluoranthene	108	77	59-128	36*	30
Chrysene	104	89	62-118	18	30
Dibenz(a,h)anthracene	96	62	32-141	45*	30
Fluoranthene	106	101	65-123	7	30
Fluorene	106	102	69-124	5	30
Indeno(1,2,3-cd)pyrene	98	63	29-143	45*	30
1-Methylnaphthalene	112	109	67-117	5	30
2-Methylnaphthalene	108	107	71-126	4	30
Naphthalene	105	102	58-131	5	30
Phenanthrene	104	101	67-117	5	30
Pyrene	113	108	59-125	7	30

Batch number: 131111848001	Sample number(s): 7029721-7029736 UNSPK: 7029721 BKG: 7029721							
Arsenic	116	115	81-123	1	20	N.D.	N.D.	0 (1) 20
Barium	113	113	78-118	1	20	0.0226	0.0251	11 (1) 20
Cadmium	117*	116	83-116	1	20	N.D.	N.D.	0 (1) 20
Calcium	124*	127*	81-118	1	20	3.04	3.49	14 20

*- Outside of specification

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- (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: 04/22/13 at 01:19 PM

Group Number: 1384442

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	115	116	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	117	116	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	122	125	75-125	1	20	1.54	1.78	14	20
Nickel	119*	118*	86-115	1	20	0.0019 J	N.D.	200* (1)	20
Selenium	113	113	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	111	111	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	116*	116*	90-111	0	20	0.0015 J	N.D.	200* (1)	20

Batch number: 131125713001

Sample number(s): 7029721-7029736 UNSPK: 7029721 BKG: 7029721

Mercury 105 102 80-120 3 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: C131111AA

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

7029721	102	104	98	98
7029722	102	104	99	99
7029723	101	103	99	99
7029725	101	104	98	97
7029726	102	103	97	96
7029727	103	105	97	96
7029728	103	105	98	96
7029729	103	105	98	97
7029730	102	103	98	98
7029731	102	104	98	98
7029732	101	104	98	98
7029733	101	104	97	97
7029734	102	104	97	96
7029735	102	103	97	97
7029736	102	104	98	98
7029737	102	105	97	95
Blank	102	103	97	95
LCS	102	103	99	98
MS	102	104	99	99
MSD	101	103	99	99

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

Analysis Name: PAHs in waters by SIM

Batch number: 13111WAA026

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

7029721	102	104	97
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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: 1384442

Reported: 04/22/13 at 01:19 PM

Surrogate Quality Control

7029722	100	101	99
7029723	97	72	97
7029725	104	109	99
7029726	102	102	95
7029727	103	107	98
7029728	94	76	94
7029729	99	99	96
7029730	67	47*	72
7029731	60*	43*	67
7029732	72	42*	83
7029733	65	44*	70
7029734	102	103	98
7029735	97	94	94
7029736	98	97	97
Blank	93	105	88
LCS	100	111	100
MS	100	101	99
MSD	97	72	97
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 # 1384442 Sample # 7029721-37
Instructions on reverse side correspond with circled numbers.

Instructions on reverse side correspond with circled numbers

pg 1

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



**Lancaster
Laboratories**

For Lancaster Laboratories use only
Acct. # 14739 Group # 1384442 Sample # 7029721-37
(Instructions on reverse side correspond with circled numbers.)

Instructions on reverse side correspond with circled numbers

P. #2

[illegible]

Eurolins 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

Environmental Sample Administration
Receipt Documentation Log

1384442

Client/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 4-21-13Custody Seal Present *: YES NOTime of Receipt: 1111

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

Source Code: 01Package: 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	1.8°	TB	WI	Y	B	waters
2	↓	1.8°	↓	↓	↓	↓	waters
3	↓	0.9	↓	↓	↓	↓	soils
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

soil: received DU11 (SO-RO-DU11) not on
COC(1) container for SO-RO-WC-180 labeled
as SO-RO-WC-181 @ 1030Unpacker Signature/Emp#: Kristin Zyl 2103Date/Time: 4-21-13 1155

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
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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