

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

May 20, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/15/2013

Group Number: 1389964

SDG: PEH50

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(Surface)051413 Grab Surface Water	7056380
WS-002(Surface)051413 Grab Surface Water	7056381
WS-BKG-002(Surface)051413 Grab Surface Water	7056382
WS-005(Surface)051413 Grab Surface Water	7056383
WS-001(Surface)051413 Grab Surface Water	7056384
WS-001(0.5-1.0)051413 Grab Surface Water	7056385
WS-004(Surface)051413 Grab Surface Water	7056386
WS-004(0.5-1.0)051413 Grab Surface Water	7056387
WS-007(Surface)051413 Grab Surface Water	7056388
WS-007(0.5-1.0)051413 Grab Surface Water	7056389
WS-006(Surface)051413 Grab Surface Water	7056390
WS-006(0.5-1.0)051413 Grab Surface Water	7056391
WS-DUP-25-051413 Grab Surface Water	7056392
WS-TB42-051413 Water	7056393

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 ExxonMobil

COPY TO

Attn: Michael J. Firth

ELECTRONIC ARCADIS

Attn: Emily Leamer

COPY TO

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1389964

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: 13135WAB026 (Sample number(s): 7056380-7056392)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7056380, 7056381, 7056384, 7056386, 7056387, 7056388, 7056389, 7056392

Sample #s: 7056382, 7056383, 7056385, 7056386, 7056387, 7056388, 7056389, 7056390, 7056391

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

Sample #s: 7056380, 7056381, 7056384, 7056392

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

SW-846 6010B, Metals

Batch #: 131351848001 (Sample number(s): 7056380-7056392 UNSPK: 7056386 BKG: 7056386)

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

Sample Description: WS-003(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056380
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 08:15 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-03 SDG#: PEH50-01

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

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

Sample Description: WS-003(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056380
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 08:15 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-03 SDG#: PEH50-01

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

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

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	16.1	0.064	0.20

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

Sample Description: WS-003(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056380
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 08:15 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-03 SDG#: PEH50-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0201	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.52	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0051 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.77	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131352AA	05/15/2013 22:29	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/15/2013 22:29	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 02:42	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:29	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056381
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-02 SDG#: PEH50-02

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056381
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-02 SDG#: PEH50-02

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

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

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	16.0	0.064	0.20

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

Sample Description: WS-002(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056381
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-02 SDG#: PEH50-02

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	
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	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.52	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0012 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.76	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0014 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	C131352AA	05/16/2013 02:14	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 02:14	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 03:10	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:33	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-BKG-002(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056382
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:15 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14BK2 SDG#: PEH50-03

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	3.3 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-BKG-002(Surface) 051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056382
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:15 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14BK2 SDG#: PEH50-03

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	40.3	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	0.0578	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-BKG-002(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056382
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 09:15 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14BK2 SDG#: PEH50-03

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	
01750	Calcium	7440-70-2	9.42	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0058 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0205	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.08	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0063 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 VOCs8260	SW-846 8260B 25mL purge	1	C131352AA	05/16/2013 02:36	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 02:36	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 03:39	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:37	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056383
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 10:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-05 SDG#: PEH50-04

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056383
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-05 SDG#: PEH50-04

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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.8	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	0.0158	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-005(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056383
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-05 SDG#: PEH50-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.74	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0015 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0012 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	C131352AA	05/16/2013 02:59	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 02:59	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 04:07	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:41	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-001(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056384
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-11 SDG#: PEH50-05

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056384
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-11 SDG#: PEH50-05

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.5	0.064	0.20

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

Sample Description: WS-001(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056384
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-11 SDG#: PEH50-05

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	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0235	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.61	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0073 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0028 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	0.0022 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131352AA	05/16/2013 03:21	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 03:21	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 04:36	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:46	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056385
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:20 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-12 SDG#: PEH50-06

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056385
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:20 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-12 SDG#: PEH50-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0228	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056385
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-12 SDG#: PEH50-06

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	
01750	Calcium	7440-70-2	3.60	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0014 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0068 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.79	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	0.0014 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	C131352AA	05/16/2013 03:43	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 03:43	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 05:04	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:50	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-004(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056386
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:30 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-41 SDG#: PEH50-07

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	6.0	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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056386
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:30 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-41 SDG#: PEH50-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	46.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0127 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.295	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-004(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056386
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-41 SDG#: PEH50-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	7.18	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0466	0.0011	0.0150	1
07055	Lead	7439-92-1	0.131	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.00	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0366	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	0.0650	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	C131352AA	05/16/2013 04:05	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 04:05	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 05:33	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 18:46	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-004(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056387
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:40 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-42 SDG#: PEH50-08

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	6.1	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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056387
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:40 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-42 SDG#: PEH50-08

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	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	45.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0130 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.271	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-004(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056387
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 11:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-42 SDG#: PEH50-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	7.29	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0423	0.0011	0.0150	1
07055	Lead	7439-92-1	0.117	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.67	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0344	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	0.0580	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	C131352AA	05/16/2013 04:27	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 04:27	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 06:01	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:54	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-007(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056388
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-71 SDG#: PEH50-09

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	8.6	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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056388
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:00 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-71 SDG#: PEH50-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.011 J	0.010	0.050	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	50.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0102 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.335	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-007(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056388
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-71 SDG#: PEH50-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	8.12	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0452	0.0011	0.0150	1
07055	Lead	7439-92-1	0.136	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.41	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0377	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	0.0633	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	C131352AA	05/16/2013 04:50	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 04:50	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 06:30	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 19:58	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056389
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:10 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-72 SDG#: PEH50-10

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056389
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:10 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-72 SDG#: PEH50-10

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	0.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	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	0.013 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.033 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	0.012 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.024 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	0.046 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	0.013 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	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	0.054	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	50.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0101 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.337	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-007(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056389
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-72 SDG#: PEH50-10

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	
01750	Calcium	7440-70-2	7.97	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0443	0.0011	0.0150	1
07055	Lead	7439-92-1	0.133	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.33	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0377	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	0.0637	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000073 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	C131352AA	05/16/2013 05:12	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 05:12	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 20:42	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 20:02	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 08:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-006(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056390
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:40 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-61 SDG#: PEH50-11

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056390
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-61 SDG#: PEH50-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.8	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	0.0202	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006(Surface)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056390
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-61 SDG#: PEH50-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.67	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0012 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.85	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	C131352AA	05/16/2013 05:35	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 05:35	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 21:10	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 20:13	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 09:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056391
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:50 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-62 SDG#: PEH50-12

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)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056391
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:50 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14-62 SDG#: PEH50-12

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	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.7	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	0.0223	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006(0.5-1.0)051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056391
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 12:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14-62 SDG#: PEH50-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.69	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0012 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.81	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 VOCs8260	SW-846 8260B 25mL purge	1	C131352AA	05/16/2013 05:57	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 05:57	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 21:39	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 20:17	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 09:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-DUP-25-051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056392
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14D25 SDG#: PEH50-13FD

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-DUP-25-051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056392
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 by TM

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14D25 SDG#: PEH50-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.2	0.064	0.20

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

Sample Description: WS-DUP-25-051413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056392
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/15/2013 09:25

PO Box 4416

Reported: 05/20/2013 13:47

Houston TX 77210-4416

14D25 SDG#: PEH50-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0201	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.56	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0067 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0017 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	0.0018 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	C131352AA	05/16/2013 06:20	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/16/2013 06:20	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13135WAB026	05/16/2013 22:08	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13135WAB026	05/15/2013 19:45	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131356256001	05/15/2013 22:47	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07046	Barium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
01750	Calcium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07051	Chromium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07055	Lead	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07061	Nickel	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07036	Selenium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07066	Silver	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131351848001	05/15/2013 20:21	John P Hook	1
00259	Mercury	SW-846 7470A	1	131355713001	05/16/2013 09:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131351848001	05/15/2013 11:15	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131355713001	05/15/2013 16:45	Nelli S Markaryan	1

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

Sample Description: WS-TB42-051413 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056393
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14T42 SDG#: PEH50-14TB*

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-TB42-051413 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7056393
LLI Group # 1389964
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/14/2013

ExxonMobil

Submitted: 05/15/2013 09:25

Mobil Pipeline Company

Reported: 05/20/2013 13:47

PO Box 4416

Houston TX 77210-4416

14T42 SDG#: PEH50-14TB*

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	C131352AA	05/15/2013 23:37	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131352AA	05/15/2013 23:37	Kevin A Sposito	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/20/13 at 01:47 PM

Group Number: 1389964

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: C131352AA	Sample number(s): 7056380-7056393								
Acetone	N.D.	3.0	5.0	ug/l	104		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	92		61-130		
Benzene	N.D.	0.1	0.5	ug/l	102		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	108		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	101		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	108		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	99		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	95		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	104		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	97		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	103		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	83		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	101		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	101		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	107		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	105		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	70		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	102		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	102		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	110		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	129		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	104		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	103		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	102		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	100		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	95		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	82		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	107		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	97		61-125		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1389964

Reported: 05/20/13 at 01:47 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	102		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	98		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	99		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	107		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Styrene	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	104		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	104		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	99		65-131		
Toluene	N.D.	0.1	0.5	ug/l	103		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		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	107		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	100		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	104		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	90		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	104		80-120		

Batch number: 13135WAB026

Sample number(s): 7056380-7056392

Acenaphthene	N.D.	0.010	0.050	ug/l	94	95	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	102	103	72-113	2	30
Anthracene	N.D.	0.010	0.050	ug/l	110	112	70-117	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	113	115	75-115	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	96	97	72-120	1	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	110	111	74-130	1	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	102	104	63-121	2	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	103	104	74-118	1	30
Chrysene	N.D.	0.010	0.050	ug/l	105	106	75-112	2	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	102	107	66-122	4	30
Fluoranthene	N.D.	0.010	0.050	ug/l	95	97	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	92	95	74-115	3	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	98	100	66-122	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	101	101	72-114	0	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	99	100	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	95	96	67-118	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	103	104	72-109	1	30
Pyrene	N.D.	0.010	0.050	ug/l	113	114	71-116	1	30

Batch number: 131351848001

Sample number(s): 7056380-7056392

Arsenic	N.D.	0.0068	0.0200	mg/l	99		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	99		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	101		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	95		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	103		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	101		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	103		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	98		90-110		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1389964

Reported: 05/20/13 at 01:47 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: 131355713001	Sample number(s): 7056380-7056392								
Mercury	N.D.	0.00007	0.00020	mg/l	92		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: C131352AA	Sample number(s): 7056380-7056393 UNSPK: 7056380								
Acetone	120	114	57-163	5	30				
Allyl Chloride	98	105	67-139	7	30				
Benzene	111	115	87-126	4	30				
Bromobenzene	107	111	80-123	4	30				
Bromochloromethane	110	114	82-125	3	30				
Bromodichloromethane	107	111	82-133	4	30				
Bromoform	116	121	60-138	4	30				
Bromomethane	106	109	41-145	3	30				
2-Butanone	110	103	63-146	6	30				
n-Butylbenzene	107	112	83-131	4	30				
sec-Butylbenzene	110	115	84-128	4	30				
tert-Butylbenzene	110	116	84-135	5	30				
Carbon Tetrachloride	117	120	81-148	3	30				
Chlorobenzene	113	118	78-133	4	30				
Chloroethane	105	109	70-139	4	30				
Chloroform	111	115	86-136	4	30				
Chloromethane	89	93	55-152	4	30				
2-Chlorotoluene	108	112	81-120	4	30				
4-Chlorotoluene	110	113	82-119	3	30				
1,2-Dibromo-3-chloropropane	122	108	43-143	12	30				
Dibromochloromethane	113	116	79-125	3	30				
1,2-Dibromoethane	105	111	84-127	5	30				
Dibromomethane	107	112	83-126	4	30				
1,2-Dichlorobenzene	107	113	83-117	5	30				
1,3-Dichlorobenzene	110	114	81-118	4	30				
1,4-Dichlorobenzene	107	111	79-120	4	30				
Dichlorodifluoromethane	76	75	28-136	2	30				
1,1-Dichloroethane	109	114	88-136	4	30				
1,2-Dichloroethane	106	110	82-135	4	30				
1,1-Dichloroethene	120	125	83-150	4	30				
cis-1,2-Dichloroethene	112	118	82-129	4	30				
trans-1,2-Dichloroethene	116	119	88-127	3	30				
Dichlorofluoromethane	138	143	59-176	4	30				
1,2-Dichloropropane	109	114	91-126	4	30				
1,3-Dichloropropane	105	109	80-127	4	30				
2,2-Dichloropropane	111	118	80-134	6	30				
1,1-Dichloropropene	113	116	86-139	3	30				
cis-1,3-Dichloropropene	103	109	74-132	6	30				
trans-1,3-Dichloropropene	97	102	71-128	5	30				
Ethyl ether	82	88	67-127	7	30				

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1389964

Reported: 05/20/13 at 01:47 PM

Sample Matrix Quality Control

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

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	111	116	80-140	4	30				
Freon 113	121	120	87-158	1	30				
Hexachlorobutadiene	104	108	65-128	4	30				
Isopropylbenzene	112	118	81-133	5	30				
p-Isopropyltoluene	110	115	84-124	5	30				
Methyl Tertiary Butyl Ether	98	105	82-132	7	30				
4-Methyl-2-Pentanone	97	105	69-149	8	30				
Methylene Chloride	114	119	84-122	4	30				
n-Propylbenzene	108	112	79-131	4	30				
Styrene	113	118	63-151	5	30				
1,1,1,2-Tetrachloroethane	111	116	87-126	5	30				
1,1,2,2-Tetrachloroethane	103	109	75-131	6	30				
Tetrachloroethene	116	120	75-129	3	30				
Tetrahydrofuran	115	108	56-154	6	30				
Toluene	112	116	83-127	4	30				
1,2,3-Trichlorobenzene	97	101	73-125	5	30				
1,2,4-Trichlorobenzene	96	104	77-120	8	30				
1,1,1-Trichloroethane	114	117	85-140	3	30				
1,1,2-Trichloroethane	109	114	85-129	4	30				
Trichloroethene	114	118	85-131	4	30				
Trichlorofluoromethane	112	112	67-161	0	30				
1,2,3-Trichloropropane	101	109	76-120	7	30				
1,2,4-Trimethylbenzene	108	113	87-126	5	30				
1,3,5-Trimethylbenzene	110	114	89-129	3	30				
Vinyl Chloride	99	103	65-151	4	30				
Xylene (Total)	113	117	81-137	4	30				

Batch number: 131351848001	Sample number(s): 7056380-7056392 UNSPK: 7056386 BKG: 7056386								
Arsenic	101	100	81-123	1	20	0.0127 J	0.0139 J	9 (1)	20
Barium	106	106	78-118	0	20	0.295	0.280	5	20
Cadmium	99	99	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	101	100	81-118	1	20	7.18	7.10	1	20
Chromium	109	108	81-120	1	20	0.0466	0.0451	3 (1)	20
Lead	119	120	75-125	0	20	0.131	0.125	5	20
Magnesium	169*	164*	75-125	1	20	7.00	6.94	1	20
Nickel	105	106	86-115	0	20	0.0366	0.0360	2 (1)	20
Selenium	98	96	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	108	107	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	109	107	90-111	1	20	0.0650	0.0613	6	20

Batch number: 131355713001	Sample number(s): 7056380-7056392 UNSPK: 7056385 BKG: 7056385								
Mercury	90	90	80-120	1	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: NHDES VOCs 25ml purge

*- 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: 1389964

Reported: 05/20/13 at 01:47 PM

Surrogate Quality Control

Batch number: C131352AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7056380	103	104	98	95
7056381	104	103	98	94
7056382	104	105	98	94
7056383	103	101	99	95
7056384	104	101	99	95
7056385	103	105	99	93
7056386	103	101	97	94
7056387	103	103	98	94
7056388	103	102	97	93
7056389	104	102	98	95
7056390	104	103	99	94
7056391	103	103	99	95
7056392	103	101	98	94
7056393	102	103	99	94
Blank	103	103	99	96
LCS	101	105	101	98
MS	101	101	101	98
MSD	101	101	101	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13135WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7056380	81	56*	81
7056381	71	42*	78
7056382	74	62	75
7056383	84	75	82
7056384	71	52*	73
7056385	79	65	79
7056386	24*	12*	34*
7056387	27*	13*	37*
7056388	17*	9*	22*
7056389	28*	17*	37*
7056390	90	70	81
7056391	94	76	86
7056392	84	60*	77
Blank	87	102	84
LCS	92	109	91
LCSD	92	109	90
Limits:	64-120	62-141	58-134

*- Outside of specification

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

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 14739 Group # 1389964 Sample # 7056380-93
For Lancaster Laboratories use only
Instructions on reverse side correspond with circled numbers.

Pg. 1 of 2

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks						
Preservation Code																										
Facility #/SID <u>Mayflower Pipe Incident</u> Site Address <u>Mayflower, AR</u> ExxonMobil PM <u>Scott Rushrore</u> Consultant/Office <u>ARCADIS</u> Consultant PM <u>Steve Barrick</u> Sampler <u>859-559-5680</u> <u>Tyler Milburn/Hans Van Aller</u>				Cost Center/AFE Consultant Phone # <u>919-302-6799</u>				☐ Sediment ☐ Ground ☒ Surface ☐ Potable ☐ NPDES ☐ Air ☐ Oil				Total # of Containers <u>VOLs 8260B</u> <u>PAH 8270 SIM</u> <u>RCRA Metals + W.C. Ni, Mo</u>												SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other		
2 Sample Identification			3 Collected		Grab		Composite																			
Date	Time																									
WS-003 (surface) 051413	5/14/13	0815	✓																							
WS-002 (surface) 051413		0900	✓																							
WS-BKG-002 (surface) 051413		0915	✓																							
WS-005 (surface) 051413		1000	✓																							
WS-001 (surface) 051413		1100	✓																							
WS-001 (0.5-1.0) 051413		1120	✓																							
WS-004 (surface) 051413		1130	✓																							
WS-004 (0.5-1.0) 051413		1140	✓																							
WS-007 (surface) 051413		1200	✓																							
WS-007 (0.5-1.0) 051413		1210	✓																							
WS-006 (surface) 051413		1240	✓																							
WS-006 (0.5-1.0) 051413		1250	✓																							
7 Turnaround Time Requested (TAT) (please circle) Standard 5 day 4 day <u>72 hour</u> 48 hour 24 hour				Relinquished by <u>Tyler Miller</u> Relinquished by Relinquished by Relinquished by Commercial Carrier UPS _____ FedEx ☒ Other _____				Date <u>5/14/13</u> Date Date Date Temperature Upon Receipt <u>18-19°C</u>				Time <u>1500</u> Time Time Time Custody Seals Intact? <u>Yes</u> No				Received by Received by Received by Received by <u>Humm/1/1/1</u> Date <u>5.15.13</u> Time <u>925</u>										
8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____				EDD (circle if required) Locus EIM (default) Other _____																						

Acct. # 14739

For Lancaster Laboratories use only
Group # 1389964 Sample # 7056380-93
Instructions on reverse side correspond with circled numbers.

Pg. 2 of 2

[illegible]

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

Environmental Sample Administration
Receipt Documentation Log

1389964

Client/Project: Exxon mobilShipping Container Sealed: YES NODate of Receipt: 5.15.13Custody Seal Present * : YES NOTime of Receipt: 925* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 50-1Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	2037	1.8	TB	WI	Y	B	
2	↓	1.9	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Rec 1 Sm Amber no ID Time = 815Unpacker Signature/Emp#: Benny [Signature] 2299 Date/Time: 5.15.13 951

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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