

## 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 17, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/14/2013

Group Number: 1389633

SDG: PEH46

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
WS-011(1.5-2.0)051313 Grab Surface Water	7054733
WS-011(5.0-5.5)051313 Grab Surface Water	7054734
WS-010(1.5-2.0)051313 Grab Surface Water	7054735
WS-012(1.5-2.0)051313 Grab Surface Water	7054736
WS-012(4.5-5.0)051313 Grab Surface Water	7054737
WS-014(1.5-2.0)051313 Grab Surface Water	7054738
WS-014(4.0-4.5)051313 Grab Surface Water	7054739
WS-018(1.0-1.5)051313 Grab Surface Water	7054740
WS-FB-32-051313 Grab Water	7054741
WS-003(Surface)051313 Grab Surface Water	7054742
WS-002(Surface)051313 Grab Surface Water	7054743
WS-BKG-002(Surface)051313 Grab Surface Water	7054744
WS-008(Surface)051313 Grab Surface Water	7054745
WS-008(Surface)MS051313 Grab Surface Water	7054746
WS-008(Surface)MSD051313 Grab Surface Water	7054747
WS-008(Surface)DUP051313 Grab Surface Water	7054748
WS-001(Surface)051313 Grab Surface Water	7054749
WS-001(0.5-1.0)051313 Grab Surface Water	7054750
WS-004(Surface)051313 Grab Surface Water	7054751
WS-004(0.5-1.0)051313 Grab Surface Water	7054752
WS-007(Surface)051313 Grab Surface Water	7054753
WS-007(0.5-1.0)051313 Grab Surface Water	7054754
WS-006(Surface)051313 Grab Surface Water	7054755
WS-006(0.5-1.0)051313 Grab Surface Water	7054756
WS-019(Surface)051313 Grab Surface Water	7054757
WS-TB41-051313 Water	7054758

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Scott Bushroe
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

---

Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1389633

**General Comments:**

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

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

Project specific QC samples are included in this data set

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

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

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

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

Batch #: H131342AA (Sample number(s): 7054733-7054740, 7054742-7054747, 7054749-7054758 UNSPK: 7054745)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 1,2-Dichloroethane

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

**SW-846 8270C SIM, GC/MS Semivolatiles**

Batch #: 13134WAL026 (Sample number(s): 7054733-7054740, 7054742-7054747, 7054749-7054751, 7054754-7054756 UNSPK: 7054745)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7054749, 7054751, 7054754

Batch #: 13134WAM026 (Sample number(s): 7054757)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7054757

Batch #: 13136WAL026 (Sample number(s): 7054752-7054753)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7054752, 7054753

Sample #s: 7054757

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

Sample #s: 7054752, 7054753

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.

Sample #s: 7054749

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 #: 131341848001 (Sample number(s): 7054733-7054755 UNSPK: 7054745 BKG: 7054745)

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

Batch #: 131341848002 (Sample number(s): 7054756-7054757 UNSPK: 7054756 BKG: 7054756)

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

**EPA 1664A, Wet Chemistry**

Batch #: 13135807902A (Sample number(s): 7054733-7054734, 7054736-7054740, 7054742-7054751, 7054753, 7054755-7054756 UNSPK: 7054745 BKG: 7054745)

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

Sample Description: WS-011(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054733  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 09:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13111 SDG#: PEH46-01

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-011(1.5-2.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054733**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 09:20 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

131111 SDG#: PEH46-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.052	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.1	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0181	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.33	0.0640	0.200	1

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

Sample Description: **WS-011(1.5-2.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054733**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 09:20 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13111 SDG#: PEH46-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.66	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.0045	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 18:50	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 18:50	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 02:39	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:29	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054734  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 09:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13112 SDG#: PEH46-02

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-011(5.0-5.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054734  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 09:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13112 SDG#: PEH46-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.016 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.026 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	0.069	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.063	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.041 J	0.010	0.051	1
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.3	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0180	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.38	0.0640	0.200	1

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

Sample Description: **WS-011(5.0-5.5)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054734**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 09:30 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13112 SDG#: PEH46-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.68	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00010 J	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 19:11	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 19:11	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 03:10	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:33	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054735  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:00 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13-10 SDG#: PEH46-03

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

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

Sample Description: WS-010(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054735  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:00 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13-10 SDG#: PEH46-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.064	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.9	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0268	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.44	0.0640	0.200	1

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

Sample Description: **WS-010(1.5-2.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054735**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:00 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13-10 SDG#: PEH46-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0025 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	0.0019 J	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 19:33	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 19:33	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 03:39	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:44	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13136807901A	05/16/2013 10:07	Yolunder Y Bunch	1

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

Sample Description: WS-012(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054736  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13121 SDG#: PEH46-04

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

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

Sample Description: WS-012(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054736  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13121 SDG#: PEH46-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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	0.055	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.4	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0193	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.38	0.0640	0.200	1

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

Sample Description: WS-012(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054736  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13121 SDG#: PEH46-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.70	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00086	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 19:54	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 19:54	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 04:09	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:49	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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



Sample Description: WS-012(4.5-5.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054737  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:40 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13122 SDG#: PEH46-05

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-012(4.5-5.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054737  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:40 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13122 SDG#: PEH46-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.068	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.5	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0195	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.40	0.0640	0.200	1

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

Sample Description: **WS-012(4.5-5.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054737**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:40 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13122 SDG#: PEH46-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.71	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	0.0015 J	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00033	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	2.1 J	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 20:16	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 20:16	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 04:39	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:53	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-014(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054738  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13141 SDG#: PEH46-06

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-014(1.5-2.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054738  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13141 SDG#: PEH46-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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	0.064	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.2	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0145	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.35	0.0640	0.200	1

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

Sample Description: **WS-014(1.5-2.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054738**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 11:20 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13141 SDG#: PEH46-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.67	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.000099 J	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	1.6 J	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 20:38	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 20:38	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 05:09	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:57	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-014(4.0-4.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054739  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13142 SDG#: PEH46-07

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

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

Sample Description: WS-014(4.0-4.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054739  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13142 SDG#: PEH46-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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	0.041 J	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.4	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0150	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.38	0.0640	0.200	1

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



Sample Description: WS-014(4.0-4.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054739  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13142 SDG#: PEH46-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.69	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00052	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 20:59	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 20:59	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 08:28	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:01	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-018(1.0-1.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054740  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 12:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13-18 SDG#: PEH46-08

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

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

Sample Description: WS-018(1.0-1.5)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054740  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 12:30 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13-18 SDG#: PEH46-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.2	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0206	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.32	0.0640	0.200	1

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

Sample Description: **WS-018(1.0-1.5)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054740**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 12:30 by **TM** **ExxonMobil**  
**Mobil Pipeline Company**  
 Submitted: 05/14/2013 09:25 **PO Box 4416**  
 Reported: 05/17/2013 14:47 **Houston TX 77210-4416**

13-18 SDG#: **PEH46-08**

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.67	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00034	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

**General Sample Comments**

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 21:20	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 21:20	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 08:57	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:05	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 07:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: **WS-FB-32-051313 Grab Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054741**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 12:45 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13F32 SDG#: PEH46-09FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	N.D.	0.064	0.20	1
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.00064 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	N.D.	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	N.D.	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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		Analyst	Dilution Factor
					Date	Time		
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013	22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013	18:09	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013	07:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013	11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013	16:15	Nelli S Markaryan	1

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

Sample Description: WS-003 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054742  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 08:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13-03 SDG#: PEH46-10

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

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

Sample Description: WS-003 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054742  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 08:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13-03 SDG#: PEH46-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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	0.2 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.2 J	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.043 J	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.7	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0232	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.38	0.0640	0.200	1

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

Sample Description: **WS-003 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054742**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 08:30 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13-03 SDG#: PEH46-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.77	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0019 J	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	2.1 J	1.4	5.0	1

**General Sample Comments**

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 21:42	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 21:42	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 09:27	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:13	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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



Sample Description: WS-002 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054743  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:00 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13-02 SDG#: PEH46-11

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-002 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054743  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 10:00 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13-02 SDG#: PEH46-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.044 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
<b>Metals</b>		<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	15.4	0.064	0.20	1
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0162	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.40	0.0640	0.200	1

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

Sample Description: **WS-002 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054743**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:00 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13-02 SDG#: PEH46-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.67	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0016 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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 22:03	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 22:03	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 09:58	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:17	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: **WS-BKG-002 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054744**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:45 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13BK2 SDG#: PEH46-12

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

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

Sample Description: **WS-BKG-002 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054744**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:45 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13BK2 SDG#: PEH46-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.039 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
<b>Metals SM 2340 B-1997</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	37.6	0.064	0.20	1
<b>SW-846 6010B</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0571	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.77	0.0640	0.200	1

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

Sample Description: **WS-BKG-002 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054744**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 10:45 by **TM** **ExxonMobil**  
**Mobil Pipeline Company**  
 Submitted: 05/14/2013 09:25 **PO Box 4416**  
 Reported: 05/17/2013 14:47 **Houston TX 77210-4416**

13BK2 SDG#: PEH46-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0063 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0221	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.82	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0056 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	0.0110	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	5.0	1

**General Sample Comments**

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 22:25	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 22:25	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 10:28	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:21	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-008 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054745  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13008 SDG#: PEH46-13BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	4.5 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	0.2 J	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-008 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054745**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 11:20 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13008 SDG#: PEH46-13BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.4 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	0.4 J	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.011 J	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.015 J	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	0.022 J	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.033 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	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	0.057	0.011	0.053	1
<b>Metals SM 2340 B-1997</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	85.4	0.064	0.20	1
<b>SW-846 6010B</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0530	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.0	0.0640	0.200	1

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



Sample Description: WS-008 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054745  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13008 SDG#: PEH46-13BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0027 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0098 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	9.80	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0071 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	0.0038 J	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 17:44	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 17:44	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/15/2013 23:11	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:04	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-008 (Surface)MS051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054746  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13008 SDG#: PEH46-13MS

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	42	3.0	5.0	1
02898	Allyl Chloride	107-05-1	6.1	0.1	0.5	1
02898	Benzene	71-43-2	5.5	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.0	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.3	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.9	0.1	0.5	1
02898	Bromoform	75-25-2	5.7	0.1	0.5	1
02898	Bromomethane	74-83-9	5.1	0.1	0.5	1
02898	2-Butanone	78-93-3	41	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.1	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.8	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.2	0.1	0.5	1
02898	Chloroethane	75-00-3	5.3	0.1	0.5	1
02898	Chloroform	67-66-3	6.1	0.1	0.5	1
02898	Chloromethane	74-87-3	5.2	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	4.9	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	4.9	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.3	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.4	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.5	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.0	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.0	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.0	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.3	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	6.0	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	7.1	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.3	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	7.3	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.5	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.1	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.5	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.9	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.4	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.4	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	6.0	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.9	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.4	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.2	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.9	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	31	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.5	0.2	0.5	1

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

Sample Description: **WS-008 (Surface)MS051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054746**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 11:20 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13008 SDG#: PEH46-13MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
02898	n-Propylbenzene	103-65-1	5.1	0.1	0.5	1
02898	Styrene	100-42-5	5.2	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.4	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.6	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	22	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.1	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.2	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.1	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.7	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.8	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.1	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.2	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.2	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.3	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	1.0	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.052	1
08357	Anthracene	120-12-7	1.0	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.93	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	1.2	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.67	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	1.0	0.010	0.052	1
08357	Chrysene	218-01-9	0.92	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.72	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.1	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	1.0	0.010	0.052	1
08357	Naphthalene	91-20-3	1.1	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	0.99	0.010	0.052	1
<b>Metals SM 2340 B-1997</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	105	0.064	0.20	1
<b>SW-846 6010B</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0498	0.00036	0.0050	1
01750	Calcium	7440-70-2	22.3	0.0640	0.200	1

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

Sample Description: **WS-008 (Surface)MS051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054746**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 11:20 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13008 SDG#: PEH46-13MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.207	0.0011	0.0150	1
07055	Lead	7439-92-1	0.161	0.0051	0.0150	1
01757	Magnesium	7439-95-4	11.9	0.0606	0.100	1
07061	Nickel	7440-02-0	0.525	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.152	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0520	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.533	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00090	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	28.5	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 18:06	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 18:06	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/15/2013 23:40	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:16	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-008 (Surface)MSD051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054747  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13008 SDG#: PEH46-13MSD

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	54	3.0	5.0	1
02898	Allyl Chloride	107-05-1	6.0	0.1	0.5	1
02898	Benzene	71-43-2	5.5	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.9	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.4	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.8	0.1	0.5	1
02898	Bromoform	75-25-2	5.4	0.1	0.5	1
02898	Bromomethane	74-83-9	5.1	0.1	0.5	1
02898	2-Butanone	78-93-3	52	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.1	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.0	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.1	0.1	0.5	1
02898	Chloroethane	75-00-3	5.2	0.1	0.5	1
02898	Chloroform	67-66-3	6.0	0.1	0.5	1
02898	Chloromethane	74-87-3	5.0	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.0	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	4.9	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.7	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.3	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.9	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.6	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	4.9	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.0	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	4.9	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.1	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.8	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	6.9	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.3	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.5	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	7.1	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.4	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.0	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.4	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.9	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.3	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.2	0.1	0.5	1
02898	Freon 113	76-13-1	6.0	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.5	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.3	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.1	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.8	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	30	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.4	0.2	0.5	1

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

Sample Description: WS-008 (Surface)MSD051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054747  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13008 SDG#: PEH46-13MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
02898	n-Propylbenzene	103-65-1	5.1	0.1	0.5	1
02898	Styrene	100-42-5	5.1	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.3	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.6	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.3	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.0	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.1	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.5	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.1	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.7	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.6	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.1	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.1	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.1	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.2	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.052	1
08357	Anthracene	120-12-7	1.1	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.93	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	1.2	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.64	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	1.1	0.010	0.052	1
08357	Chrysene	218-01-9	0.94	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.71	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.1	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.052	1
08357	Naphthalene	91-20-3	1.1	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	0.99	0.010	0.052	1
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	105	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0498	0.00036	0.0050	1
01750	Calcium	7440-70-2	22.4	0.0640	0.200	1

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

Sample Description: **WS-008 (Surface)MSD051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054747**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 11:20 by **TM** **ExxonMobil**  
**Mobil Pipeline Company**  
 Submitted: 05/14/2013 09:25 **PO Box 4416**  
 Reported: 05/17/2013 14:47 **Houston TX 77210-4416**

13008 SDG#: **PEH46-13MSD**

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.205	0.0011	0.0150	1
07055	Lead	7439-92-1	0.160	0.0051	0.0150	1
01757	Magnesium	7439-95-4	11.9	0.0606	0.100	1
07061	Nickel	7440-02-0	0.521	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.148	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0518	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.531	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00090	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	27.7	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 18:28	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 18:28	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 00:10	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:20	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-008 (Surface) DUP051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054748  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 11:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13008 SDG#: PEH46-13DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	87.8	0.064	0.20	1
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0556	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.6	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0028 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0080 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	10.0	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0073 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	0.0040 J	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 17:12	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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



Sample Description: WS-001(Surface)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054749  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:20 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13011 SDG#: PEH46-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	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)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054749  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:20 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13011 SDG#: PEH46-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.064	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 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.

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	17.2	0.064	0.20	1
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0425	0.00033	0.0050	1

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

Sample Description: WS-001(Surface)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054749  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:20 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13011 SDG#: PEH46-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.68	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0037 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0107 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.94	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0039 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	0.0054	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 22:47	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 22:47	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 10:58	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:33	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1

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

Sample Description: WS-001(Surface)051313 Grab Surface Water  
 Mayflower, AR  
 Pipeline Incident

LLI Sample # WW 7054749  
 LLI Group # 1389633  
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:20 by TM ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13011 SDG#: PEH46-14

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054750  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13012 SDG#: PEH46-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	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)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054750  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:30 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13012 SDG#: PEH46-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<b>purge</b>					
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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.082	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	18.0	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0663	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.86	0.0640	0.200	1

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

Sample Description: WS-001(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054750  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 13:30 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13012 SDG#: PEH46-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0042 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0152	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.04	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0049 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	0.0065	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 23:08	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 23:08	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 11:28	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:37	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-004(Surface)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054751  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 14:00 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13041 SDG#: PEH46-16

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	6.7	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) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054751**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 14:00 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13041 SDG#: PEH46-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	0.012 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.062	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.020 J	0.010	0.052	1
<b>Metals SM 2340 B-1997</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	48.5	0.064	0.20	1
<b>SW-846 6010B</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0079 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.320	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00041 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.74	0.0640	0.200	1

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

Sample Description: WS-004 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054751  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 14:00 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13041 SDG#: PEH46-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0491	0.0011	0.0150	1
07055	Lead	7439-92-1	0.147	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.09	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0379	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	0.0689	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.000080 J	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 23:30	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 23:30	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 00:40	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:41	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-004(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054752  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 14:10 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13042 SDG#: PEH46-17

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	9.0	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	1.7 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-004(0.5-1.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054752**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 14:10 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13042 SDG#: PEH46-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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	4.3	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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.036 J	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.048 J	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.091	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.038 J	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.029 J	0.011	0.053	1
08357	Chrysene	218-01-9	0.067	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.062	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.038 J	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	0.013 J	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.021 J	0.011	0.053	1
08357	Naphthalene	91-20-3	0.050 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	0.032 J	0.032	0.053	1
08357	Pyrene	129-00-0	0.061	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.

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.

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	70.8	0.064	0.20	1

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

Sample Description: WS-004(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054752  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 14:10 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13042 SDG#: PEH46-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0248	0.0068	0.0200	1
07046	Barium	7440-39-3	0.553	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0011 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	12.0	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0933	0.0011	0.0150	1
07055	Lead	7439-92-1	0.448	0.0051	0.0150	1
01757	Magnesium	7439-95-4	9.94	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0738	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0016 J	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.118	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	4.6 J	1.4	5.0	1

**General Sample Comments**

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/14/2013 23:52	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 23:52	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13136WAL026	05/17/2013 08:27	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13136WAL026	05/17/2013 03:00	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:45	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:25	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)051313 Grab Surface Water  
 Mayflower, AR  
 Pipeline Incident

LLI Sample # WW 7054752  
 LLI Group # 1389633  
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 14:10 by TM ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13042 SDG#: PEH46-17

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13136807901A	05/16/2013 10:07	Yolunder Y Bunch	1

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

Sample Description: WS-007 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054753  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:00 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13071 SDG#: PEH46-18

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	6.7	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) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054753**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 15:00 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13071 SDG#: PEH46-18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	0.022 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.034 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.031 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.13	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.027 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.038 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.18	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	0.15	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	0.036 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	0.033 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	0.041 J	0.031	0.051	1
08357	Pyrene	129-00-0	0.14	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.

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	49.8	0.064	0.20	1

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



Sample Description: WS-007 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054753  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:00 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13071 SDG#: PEH46-18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0120 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.347	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.54	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0534	0.0011	0.0150	1
07055	Lead	7439-92-1	0.152	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.52	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0406	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	0.0749	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.000084 J	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

**General Sample Comments**

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

**Laboratory Sample Analysis Record**

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/15/2013 00:13	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/15/2013 00:13	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13136WAL026	05/17/2013 08:57	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13136WAL026	05/17/2013 03:00	David V Hershey Jr	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:49	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:27	Damary Valentin	1

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

Sample Description: WS-007 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054753  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:00 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13071 SDG#: PEH46-18

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054754  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:10 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13072 SDG#: PEH46-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	5.4	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)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054754  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:10 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13072 SDG#: PEH46-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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	10	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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.031 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.058	0.010	0.051	1
08357	Anthracene	120-12-7	0.14	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.51	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.38	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	1.6	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.19	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.49	0.010	0.051	1
08357	Chrysene	218-01-9	1.3	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.051	0.010	0.051	1
08357	Fluoranthene	206-44-0	2.6	0.010	0.051	1
08357	Fluorene	86-73-7	0.029 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.29	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.011 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.016 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.040 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.49	0.030	0.051	1
08357	Pyrene	129-00-0	1.9	0.010	0.051	1
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	68.3	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0168 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.563	0.0033	0.0050	1
07049	Cadmium	7440-43-9	0.00094 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	9.66	0.0640	0.200	1

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

Sample Description: WS-007(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054754  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:10 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13072 SDG#: PEH46-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0770	0.0011	0.0150	1
07055	Lead	7439-92-1	0.231	0.0051	0.0150	1
01757	Magnesium	7439-95-4	10.7	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0630	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0015 J	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.113	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00012 J	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	1.9 J	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/15/2013 00:35	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/15/2013 00:35	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 02:10	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:53	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13136807901A	05/16/2013 10:07	Yolunder Y Bunch	1

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

Sample Description: WS-006 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054755  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:40 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13061 SDG#: PEH46-20

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	0.1 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054755  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:40 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13061 SDG#: PEH46-20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			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	0.015 J	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	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	0.075	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
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.5	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0351	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.78	0.0640	0.200	1

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

Sample Description: WS-006 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054755  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:40 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13061 SDG#: PEH46-20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0027 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0109 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.96	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0035 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	0.0051	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	2.4 J	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/15/2013 00:56	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/15/2013 00:56	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 11:59	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256002	05/14/2013 22:27	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07046	Barium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
01750	Calcium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07051	Chromium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07055	Lead	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07061	Nickel	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07036	Selenium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07066	Silver	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131341848001	05/14/2013 18:57	John P Hook	1
00259	Mercury	SW-846 7470A	1	131345713004	05/15/2013 08:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848001	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713004	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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



Sample Description: WS-006(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054756  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:50 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13062 SDG#: PEH46-21

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	0.1 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054756  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 15:50 by TM ExxonMobil  
Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
Reported: 05/17/2013 14:47 PO Box 4416  
Houston TX 77210-4416

13062 SDG#: PEH46-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
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
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.013 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.016 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.11	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.015 J	0.010	0.051	1
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	18.9	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0564	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.90	0.0640	0.200	1

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

Sample Description: **WS-006(0.5-1.0)051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054756**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 15:50 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13062 SDG#: PEH46-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07051	Chromium	7440-47-3	0.0051 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0093 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.21	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0041 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	0.0085	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
<b>Wet Chemistry</b>						
		<b>EPA 1664A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/15/2013 01:18	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/15/2013 01:18	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAL026	05/16/2013 12:29	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAL026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256001	05/14/2013 21:56	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131341848002	05/14/2013 17:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131345713005	05/15/2013 08:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848002	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713005	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13135807902A	05/15/2013 16:40	Michelle L Lalli	1

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

Sample Description: WS-019 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054757  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 09:15 by TM

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13019 SDG#: PEH46-22

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	5.5	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-019 (Surface) 051313 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7054757**  
 LLI Group # **1389633**  
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 05/13/2013 09:15 by **TM** ExxonMobil  
 Submitted: 05/14/2013 09:25 Mobil Pipeline Company  
 Reported: 05/17/2013 14:47 PO Box 4416  
 Houston TX 77210-4416

13019 SDG#: PEH46-22

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	9.2	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.1 J	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</b>						
			<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	0.017 J	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	0.013 J	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	0.016 J	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	0.013 J	0.011	0.054	1
08357	Fluorene	86-73-7	0.014 J	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	0.015 J	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	0.021 J	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	0.027 J	0.011	0.054	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals SM 2340 B-1997</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	86.8	0.064	0.20	1
<b>SW-846 6010B</b>						
			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0231	0.0068	0.0200	1
07046	Barium	7440-39-3	0.914	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-019 (Surface) 051313 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054757  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013 09:15 by TM ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/14/2013 09:25 PO Box 4416  
Reported: 05/17/2013 14:47 Houston TX 77210-4416

13019 SDG#: PEH46-22

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	13.4	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0997	0.0011	0.0150	1
07055	Lead	7439-92-1	0.117	0.0051	0.0150	1
01757	Magnesium	7439-95-4	12.9	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0814	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.0106 J	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.151	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00021	0.000070	0.00020	1
<b>Wet Chemistry</b>						
	<b>EPA 1664A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	5.0	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131342AA	05/15/2013 01:40	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/15/2013 01:40	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13134WAM026	05/16/2013 02:09	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13134WAM026	05/15/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131346256001	05/14/2013 21:56	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131341848002	05/14/2013 18:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131345713005	05/15/2013 08:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131341848002	05/14/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131345713005	05/14/2013 16:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13137807901A	05/17/2013 07:51	Yolunder Y Bunch	1

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

Sample Description: WS-TB41-051313 Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054758  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13T41 SDG#: PEH46-23TB\*

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-TB41-051313 Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7054758  
LLI Group # 1389633  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/13/2013

ExxonMobil

Submitted: 05/14/2013 09:25

Mobil Pipeline Company

Reported: 05/17/2013 14:47

PO Box 4416

Houston TX 77210-4416

13T41 SDG#: PEH46-23TB\*

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	H131342AA	05/14/2013 17:22	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131342AA	05/14/2013 17:22	Kevin A Sposito	1

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



## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/17/13 at 02:47 PM

Group Number: 1389633

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: H131342AA	Sample number(s): 7054733-7054740,7054742-7054747,7054749-7054758								
Acetone	N.D.	3.0	5.0	ug/l	96		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	114		61-130		
Benzene	N.D.	0.1	0.5	ug/l	101		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	106		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	115		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	113		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	97		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	100		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	124		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	97		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	113		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	96		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	94		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	94		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	86		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	104		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	98		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	109		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	95		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	98		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	111		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	135*		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	106		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	105		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	134		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	100		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	116		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	106		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	109		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	102		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	89		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	104		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	104		61-125		

\*- Outside of specification

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

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: ExxonMobil

Group Number: 1389633

Reported: 05/17/13 at 02:47 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>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	95		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	116		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	123		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	105		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Styrene	N.D.	0.1	0.5	ug/l	98		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	96		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	85		65-131		
Toluene	N.D.	0.1	0.5	ug/l	93		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	97		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	99		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	121		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	121		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	103		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	96		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	94		80-120		

Batch number: 13134WAL026

Sample number(s): 7054733-7054740, 7054742-7054747, 7054749-7054751, 7054754-7054756

Acenaphthene	N.D.	0.010	0.050	ug/l	100		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	101		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	95		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	94		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	92		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	105		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	82		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	107		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	101		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	83		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	106		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	98		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	84		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	102		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	99		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	98		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	94		71-116		

Batch number: 13134WAM026

Sample number(s): 7054757

Acenaphthene	N.D.	0.010	0.050	ug/l	100	101	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	106	106	72-113	0	30
Anthracene	N.D.	0.010	0.050	ug/l	97	97	70-117	0	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	103	107	75-115	3	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	91	96	72-120	5	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	104	111	74-130	6	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	91	101	63-121	11	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	102	109	74-118	7	30
Chrysene	N.D.	0.010	0.050	ug/l	99	105	75-112	6	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	83	100	66-122	19	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: 1389633

Reported: 05/17/13 at 02:47 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>
Fluoranthene	N.D.	0.010	0.050	ug/l	104	106	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	100	101	74-115	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	91	99	66-122	8	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	106	108	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105	106	74-119	2	30
Naphthalene	N.D.	0.030	0.050	ug/l	101	103	67-118	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	100	101	72-109	0	30
Pyrene	N.D.	0.010	0.050	ug/l	104	106	71-116	2	30

Batch number: 13136WAL026

Sample number(s): 7054752-7054753

Acenaphthene	N.D.	0.010	0.050	ug/l	104	103	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	106	105	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	108	109	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	106	106	75-115	1	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	102	102	72-120	0	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	105	111	74-130	6	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	107	107	63-121	0	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	108	101	74-118	6	30
Chrysene	N.D.	0.010	0.050	ug/l	105	103	75-112	2	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	110	108	66-122	2	30
Fluoranthene	N.D.	0.010	0.050	ug/l	107	108	73-116	1	30
Fluorene	N.D.	0.010	0.050	ug/l	101	99	74-115	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	103	104	66-122	1	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	108	108	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107	106	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	104	104	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	103	101	71-116	1	30

Batch number: 131341848001

Sample number(s): 7054733-7054755

Arsenic	N.D.	0.0068	0.0200	mg/l	100		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	100		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	100		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	99		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	97		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	102		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	105		90-110		

Batch number: 131341848002

Sample number(s): 7054756-7054757

Arsenic	N.D.	0.0068	0.0200	mg/l	96		90-113		
Barium	0.0012 J	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	100		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	99		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	99		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	101		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	98		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	95		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	95		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	101		90-110		

Batch number: 131345713004

Sample number(s): 7054733-7054755

\*- 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: 1389633

Reported: 05/17/13 at 02:47 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>
Mercury	N.D.	0.00007	0.00020	mg/l	91		80-120		
Batch number: 131345713005		Sample number(s): 7054756-7054757							
Mercury	N.D.	0.00007	0.00020	mg/l	94		80-120		
Batch number: 13135807902A		Sample number(s): 7054733-7054734, 7054736-7054740, 7054742-7054751, 7054753, 7054755-7054756							
HEM (oil & grease)	1.5 J	1.4	5.0	mg/l	91	87	78-114	5	16
Batch number: 13136807901A		Sample number(s): 7054735, 7054752, 7054754							
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	78	88	78-114	11	16
Batch number: 13137807901A		Sample number(s): 7054757							
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	93	90	78-114	3	16

## Sample Matrix Quality Control

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

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: H131342AA		Sample number(s): 7054733-7054740, 7054742-7054747, 7054749-7054758 UNSPK: 7054745							
Acetone	100	131	57-163	25	30				
Allyl Chloride	121	121	67-139	0	30				
Benzene	106	106	87-126	0	30				
Bromobenzene	99	98	80-123	1	30				
Bromochloromethane	106	107	82-125	1	30				
Bromodichloromethane	119	117	82-133	2	30				
Bromoform	113	109	60-138	4	30				
Bromomethane	103	102	41-145	1	30				
2-Butanone	110	138	63-146	22	30				
n-Butylbenzene	103	102	83-131	2	30				
sec-Butylbenzene	103	101	84-128	2	30				
tert-Butylbenzene	102	102	84-135	0	30				
Carbon Tetrachloride	136	135	81-148	1	30				
Chlorobenzene	104	102	78-133	2	30				
Chloroethane	105	105	70-139	1	30				
Chloroform	121	119	86-136	2	30				
Chloromethane	103	100	55-152	3	30				
2-Chlorotoluene	98	100	81-120	2	30				
4-Chlorotoluene	99	98	82-119	0	30				
1,2-Dibromo-3-chloropropane	87	115	43-143	28	30				
Dibromochloromethane	108	107	79-125	1	30				
1,2-Dibromoethane	99	99	84-127	1	30				
Dibromomethane	110	112	83-126	2	30				
1,2-Dichlorobenzene	101	98	83-117	3	30				
1,3-Dichlorobenzene	101	100	81-118	0	30				
1,4-Dichlorobenzene	100	97	79-120	3	30				
Dichlorodifluoromethane	105	101	28-136	4	30				
1,1-Dichloroethane	120	117	88-136	3	30				

\*- Outside of specification

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

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

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/17/13 at 02:47 PM

Group Number: 1389633

### 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</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
1,2-Dichloroethane	142*	138*	82-135	3	30				
1,1-Dichloroethene	117	116	83-150	0	30				
cis-1,2-Dichloroethene	106	107	82-129	1	30				
trans-1,2-Dichloroethene	112	111	88-127	1	30				
Dichlorofluoromethane	145	141	59-176	3	30				
1,2-Dichloropropane	110	109	91-126	1	30				
1,3-Dichloropropane	102	99	80-127	3	30				
2,2-Dichloropropane	130	129	80-134	1	30				
1,1-Dichloropropene	117	117	86-139	0	30				
cis-1,3-Dichloropropene	114	114	74-132	0	30				
trans-1,3-Dichloropropene	108	106	71-128	2	30				
Ethyl ether	87	87	67-127	1	30				
Ethylbenzene	107	105	80-140	2	30				
Freon 113	119	120	87-158	0	30				
Hexachlorobutadiene	119	111	65-128	7	30				
Isopropylbenzene	107	106	81-133	1	30				
p-Isopropyltoluene	105	103	84-124	2	30				
Methyl Tertiary Butyl Ether	119	115	82-132	3	30				
4-Methyl-2-Pentanone	123	121	69-149	1	30				
Methylene Chloride	111	108	84-122	2	30				
n-Propylbenzene	103	101	79-131	1	30				
Styrene	104	103	63-151	2	30				
1,1,1,2-Tetrachloroethane	109	106	87-126	2	30				
1,1,2,2-Tetrachloroethane	92	92	75-131	0	30				
Tetrachloroethene	112	111	75-129	1	30				
Tetrahydrofuran	86	110	56-154	25	30				
Toluene	101	99	83-127	2	30				
1,2,3-Trichlorobenzene	102	99	73-125	3	30				
1,2,4-Trichlorobenzene	104	101	77-120	3	30				
1,1,1-Trichloroethane	131	130	85-140	1	30				
1,1,2-Trichloroethane	103	102	85-129	1	30				
Trichloroethene	115	114	85-131	0	30				
Trichlorofluoromethane	136	132	67-161	2	30				
1,2,3-Trichloropropane	102	102	76-120	0	30				
1,2,4-Trimethylbenzene	104	102	87-126	2	30				
1,3,5-Trimethylbenzene	104	102	89-129	1	30				
Vinyl Chloride	106	105	65-151	1	30				
Xylene (Total)	102	101	81-137	1	30				

Batch number: 13134WAL026

Sample number(s): 7054733-7054740,7054742-7054747,7054749-7054751,7054754-7054756 UNSPK: 7054745

Acenaphthene	99	101	59-127	3	30
Acenaphthylene	100	104	33-146	4	30
Anthracene	100	103	69-119	3	30
Benzo(a)anthracene	97	100	67-124	3	30
Benzo(a)pyrene	90	90	64-123	1	30
Benzo(b)fluoranthene	110	111	61-133	1	30
Benzo(g,h,i)perylene	65	62	36-138	4	30
Benzo(k)fluoranthene	101	102	59-128	1	30
Chrysene	87	89	62-118	2	30
Dibenz(a,h)anthracene	70	69	32-141	2	30
Fluoranthene	107	107	65-123	0	30

\*- Outside of specification

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

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/17/13 at 02:47 PM

Group Number: 1389633

### 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</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>BKG</u> <u>MAX</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Fluorene	102	105	69-124	3	30			
Indeno(1,2,3-cd)pyrene	72	68	29-143	5	30			
1-Methylnaphthalene	103	106	67-117	2	30			
2-Methylnaphthalene	102	104	71-126	2	30			
Naphthalene	102	104	58-131	2	30			
Phenanthrene	102	104	67-117	1	30			
Pyrene	90	91	59-125	1	30			
Batch number: 131341848001      Sample number(s): 7054733-7054755 UNSPK: 7054745 BKG: 7054745								
Arsenic	104	103	81-123	0	20	N.D.	N.D.	0 (1) 20
Barium	102	102	78-118	0	20	0.0530	0.0556	5 20
Cadmium	100	100	83-116	0	20	N.D.	N.D.	0 (1) 20
Calcium	107 (2)	108 (2)	81-118	0	20	18.0	18.6	3 20
Chromium	102	101	81-120	1	20	0.0027 J	0.0028 J	4 (1) 20
Lead	101	100	75-125	1	20	0.0098 J	0.0080 J	21* (1) 20
Magnesium	104 (2)	107 (2)	75-125	1	20	9.80	10.0	2 20
Nickel	104	103	86-115	1	20	0.0071 J	0.0073 J	3 (1) 20
Selenium	101	99	75-125	2	20	N.D.	N.D.	0 (1) 20
Silver	104	104	75-125	0	20	N.D.	N.D.	0 (1) 20
Vanadium	106	106	90-111	0	20	0.0038 J	0.0040 J	4 (1) 20
Batch number: 131341848002      Sample number(s): 7054756-7054757 UNSPK: 7054756 BKG: 7054756								
Arsenic	102	101	81-123	1	20	N.D.	N.D.	0 (1) 20
Barium	103	103	78-118	1	20	0.0564	0.0555	1 20
Cadmium	100	100	83-116	1	20	N.D.	N.D.	0 (1) 20
Calcium	101	103	81-118	1	20	3.90	3.96	1 20
Chromium	101	101	81-120	1	20	0.0051 J	0.0048 J	6 (1) 20
Lead	100	100	75-125	0	20	0.0093 J	0.0058 J	47* (1) 20
Magnesium	98	102	75-125	2	20	2.21	2.20	1 20
Nickel	104	105	86-115	0	20	0.0041 J	0.0043 J	5 (1) 20
Selenium	98	98	75-125	0	20	N.D.	N.D.	0 (1) 20
Silver	96	95	75-125	1	20	N.D.	N.D.	0 (1) 20
Vanadium	104	103	90-111	1	20	0.0085	0.0086	1 (1) 20
Batch number: 131345713004      Sample number(s): 7054733-7054755 UNSPK: 7054745 BKG: 7054745								
Mercury	90	90	80-120	0	20	N.D.	N.D.	0 (1) 20
Batch number: 131345713005      Sample number(s): 7054756-7054757 UNSPK: 7054757 BKG: 7054757								
Mercury	101	102	80-120	0	20	0.00021	0.00021	4 (1) 20
Batch number: 13135807902A      Sample number(s): 7054733-7054734,7054736-7054740,7054742-7054751,7054753,7054755-7054756 UNSPK: 7054745 BKG: 7054745								
HEM (oil & grease)	70*	65*	78-114	3	29	N.D.	N.D.	0 (1) 18
Batch number: 13136807901A      Sample number(s): 7054735,7054752,7054754 UNSPK: P052795								
HEM (oil & grease)	83		78-114					
Batch number: 13137807901A      Sample number(s): 7054757 UNSPK: P052262								
HEM (oil & grease)	91		78-114					

\*- Outside of specification

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

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

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/17/13 at 02:47 PM

Group Number: 1389633

### 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

Batch number: H131342AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7054733	108	102	96	103
7054734	109	102	96	103
7054735	108	101	97	103
7054736	109	101	97	103
7054737	110	104	98	104
7054738	109	103	96	102
7054739	109	102	96	102
7054740	108	103	97	103
7054742	110	102	96	102
7054743	109	102	96	102
7054744	109	101	96	101
7054745	107	101	97	103
7054746	107	100	97	105
7054747	108	102	96	104
7054749	109	99	97	102
7054750	109	102	97	101
7054751	109	100	96	101
7054752	110	101	97	102
7054753	110	102	96	102
7054754	109	102	96	103
7054755	109	102	96	102
7054756	109	103	96	101
7054757	109	101	95	102
7054758	109	106	95	102
Blank	109	102	97	102
LCS	108	104	97	103
MS	107	100	97	105
MSD	108	102	96	104

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

Analysis Name: PAHs in waters by SIM

Batch number: 13134WAL026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7054733	104	84	88
7054734	106	89	92
7054735	100	83	87
7054736	101	83	84
7054737	100	83	87
7054738	107	93	89
7054739	96	87	91
7054740	100	87	90
7054742	99	87	92
7054743	103	93	90
7054744	91	88	84
7054745	104	90	91

\*- Outside of specification

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

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/17/13 at 02:47 PM

Group Number: 1389633

### Surrogate Quality Control

7054746	107	106	95
7054747	109	107	97
7054749	71	38*	80
7054750	93	79	88
7054751	57*	37*	65
7054754	52*	32*	70
7054755	83	67	80
7054756	90	72	85
Blank	104	107	91
LCS	105	106	96
MS	107	106	95
MSD	109	107	97

Limits: 64-120                      62-141                      58-134

Analysis Name: PAHs in waters by SIM

Batch number: 13134WAM026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7054757	19*	14*	33*
Blank	98	107	94
LCS	99	101	97
LCSD	103	114	101

Limits: 64-120                      62-141                      58-134

Analysis Name: PAHs in waters by SIM

Batch number: 13136WAL026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7054752	65	56*	81
7054753	64	52*	77
Blank	108	115	110
LCS	104	112	106
LCSD	104	111	104

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 # 1389633 Sample # 7054733-58  
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							SCR#: _____																				
Facility #/SID <u>Mayflower Pipe Incident</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air	Preservation Code							Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																							
Site Address <u>Mayflower AR</u>					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">H</td> <td style="width: 25%;">N</td> <td style="width: 25%;">H</td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> <tr> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>									H	N	H										✓	✓	✓							
H	N	H																																	
✓	✓	✓																																	
ExxonMobil PM <u>Scott + Bushroe</u>				Total # of Containers <u>3260 B VOCs</u> <u>PAH 8270 SEM</u> <u>Trace Metals + Ni, V, Co, Mg</u> <u>Oil &amp; Grease (NEM)</u>							6 Remarks <u>Data Analysis Questions</u> <u>Lyndi Mott/ARLADIS</u>																								
Consultant/Office <u>ARCADIS</u>																																			
Consultant PM <u>Steve Barrick</u>																																			
Consultant Phone # <u>919-302-6799</u>																																			
Sampler <u>859-559-5680</u>																																			
Site Address <u>Tyler Milburn/Hans von Aller/Dave Drost</u>																																			
2 Sample Identification			3 Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers	H	N	H																						
Date	Time																																		
<u>WS-011(1.5-2.0)051313</u>	<u>5/13/13</u>	<u>0920</u>	✓				✓			00	✓	✓	✓																						
<u>WS-011(5.0-5.5)051313</u>		<u>0930</u>	✓				✓			00	✓	✓	✓																						
<u>WS-010(1.5-2.0)051313</u>		<u>1000</u>	✓				✓			00	✓	✓	✓																						
<u>WS-012(1.5-2.0)051313</u>		<u>1030</u>	✓				✓			00	✓	✓	✓																						
<u>WS-012(4.5-5.0)051313</u>		<u>1040</u>	✓				✓			00	✓	✓	✓																						
<u>WS-014(1.5-2.0)051313</u>		<u>1120</u>	✓				✓			00	✓	✓	✓																						
<u>WS-014(4.0-4.5)051313</u>		<u>1130</u>	✓				✓			00	✓	✓	✓																						
<u>WS-018(1.0-1.5)051313</u>		<u>1230</u>	✓				✓			00	✓	✓	✓																						
<u>WS-FB-32-051313</u>		<u>1245</u>	✓				✓			00	✓	✓	✓																						
<u>WS-003(surface)051313</u>		<u>0830</u>	✓				✓			00	✓	✓	✓																						
<u>WS-002(surface)051313</u>		<u>0915</u>	✓				✓			00	✓	✓	✓																						
<u>WS-BK6-002(surface)051313</u>		<u>1045</u>	✓				✓			00	✓	✓	✓																						

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 14739 Group # 1389633 Sample # 2054733-58  
 For Lancaster Laboratories use only  
 Instructions on reverse side correspond with circled numbers.

Pg. 2 of 2

1 Client Information				4 Matrix				5 Analyses Requested							SCR#: _____					
Facility #/SID <u>May Flower Pipe Incident</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	Air <input type="checkbox"/>	Preservation Code							Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other						
Site Address <u>May Flower, AR</u>							Total # of Containers 8260B USE PAH 8270 SIM trace metals + Ni, V, Cr, Pb Oil & Grease (HEM)							6 Remarks Data Analysis questions! Lyndi Matt / ARLADIS						
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE																		
Consultant/Office <u>ARLADIS</u>							Consultant Phone # <u>919-302-6799</u>		Sampler <u>Tyler Millburn / Hans Van Aller / Dave Drost</u>											
Consultant PM <u>Steve Barrick</u>																				
2 Sample Identification		3 Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers											
Date	Time																			
WS-008 (surface) 051313	5/13/13	1120	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	MS/MSD	
WS-001 (surface) 051313		1320	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-001 (0.5-1.0) 051313		1330	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-004 (surface) 051313		1400	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-004 (0.5-1.0) 051313		1410	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-007 (surface) 051313		1500	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-007 (0.5-1.0) 051313		1510	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-006 (surface) 051313		1540	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-006 (0.5-1.0) 051313		1550	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-019 (surface) 051313		0915	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-TR41-051313			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

7 Turnaround Time Requested (TAT) (please circle) Standard      5 day      4 day <u>72 hour</u> 48 hour      24 hour			Relinquished by _____		Date _____	Time _____	Received by _____	Date _____	Time _____	
			Relinquished by _____		Date _____	Time _____	Received by _____	Date _____	Time _____	
			Relinquished by _____		Date _____	Time _____	Received by _____	Date _____	Time _____	
8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____			EDD (circle if required) Locus EIM (default) Other _____			Relinquished by Commercial Carrier		Received by <u>Bunny</u>	Date <u>5.14.13</u>	Time <u>925</u>
						UPS _____ FedEx <input checked="" type="checkbox"/> Other _____		Temperature Upon Receipt <u>0.5-3.4c</u>		Custody Seals Intact? <u>Yes</u> No

Jill M. Parker

14739 1389633 7054733-58

**From:** Van Aller, Hans [Hans.VanAller@arcadis-us.com]  
**Sent:** Tuesday, May 14, 2013 6:41 AM  
**To:** Mott, Lyndi; Kathy Klinefelter; SA Env Entry; Rachel L. Kreamer; Jill M. Parker  
**Cc:** Molina, Joe; Lipka, Shelby; Milburn, Tyler; Capria, Dennis; Barrick, Stephen  
**Subject:** RE: Mayflower CoCs Surface water sampling 051313  
**Attachments:** signed coc 5-13-13 1of 2.jpg; signed coc 5-13-13 2of 2.jpg

Hello

Attached are the copies of the signed CoCs.

Thank you

Hans

---

**From:** Mott, Lyndi  
**Sent:** Monday, May 13, 2013 8:07 PM  
**To:** KKlinefelter@lancasterlabs.com; SA Env Entry; Rachel L. Kreamer; Jill M. Parker  
**Cc:** Molina, Joe; Lipka, Shelby; Milburn, Tyler; Van Aller, Hans; Capria, Dennis; Barrick, Stephen  
**Subject:** RE: Mayflower CoCs Surface water sampling 051313

Kathy,

Please note that the COC that was sent with the samples was inadvertently not signed by the sampler before shipping. I will have the sampler sign our copy tomorrow and send you a copy for your records.

Thank you,  
 Lyndi Mott

---

**From:** Van Aller, Hans  
**Sent:** Monday, May 13, 2013 7:35 PM  
**To:** KKlinefelter@lancasterlabs.com; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Suer, Jake; Rachel L. Kreamer  
**Cc:** Molina, Joe; Lipka, Shelby; Price, Richard; Milburn, Tyler  
**Subject:** Mayflower CoCs Surface water sampling 051313

Hello All

Attached are the CoCs from today's surface water sampling activities.

Thanks,

Hans H. van Aller IV | Field Tech 3 | [Hans.VanAller@arcadis-us.com](mailto:Hans.VanAller@arcadis-us.com)  
 ARCADIS U.S., Inc. | 630 Plaza Drive, Suite 100 | Highlands Ranch, CO 80129  
 T. 720.344.3500 | M.720.635.0173 | F. 720.344.3535

[www.arcadis-us.com](http://www.arcadis-us.com)

ARCADIS, Imagine the result

Please consider the environment before printing this email.

---

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of

5/14/2013

14739 1389633 7054733-58

this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.

# ExxonMobil Analysis Request/Chain of Custody



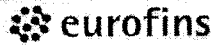
**Lancaster Laboratories**

Acct. # 14739 For Lancaster Laboratories use only Group # 13891633 Sample # 7054733-58  
Instructions on reverse side correspond with circled numbers.

pg. 2 of 2

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks																															
Facility #/SID <u>May Flower Pipe Incident</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	Preservation Code										SCR#:																																	
Site Address <u>May Flower AR</u>						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>H</td><td></td><td>N</td><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										H		N	H																													Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other	
H		N	H																																														
ExxonMobil PM <u>Scott Bushroa</u>		Cost Center/AFE		Total # of Containers 82608 VOLS PAH 8270 SIM POLYAROMATICS POLYAROMATICS - H.V. (G. M) OIL & GREASE (HEM)										6 Data Analysis requested Lyndi Math/ ARLADIS																																			
Consultant/Office <u>ARLADIS</u>		Consultant Phone # <u>919-302-6799</u>																																															
Consultant PM <u>Steve Barrick</u>				Composite <input type="checkbox"/> Grab <input type="checkbox"/>				Total # of Containers 82608 VOLS PAH 8270 SIM POLYAROMATICS POLYAROMATICS - H.V. (G. M) OIL & GREASE (HEM)										6 Data Analysis requested Lyndi Math/ ARLADIS																															
Sampler <u>Tyler Milburn/Hans Von Ailer/Dave Drost</u>																																																	
2 Sample Identification		Collected		3	Soil	Water	Oil	Total # of Containers											MS/MSD																														
Sample ID	Date	Time	Grab																																														
WS-008 (Surface) 051313	5/13/13	1120	✓		✓			24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-001 (Surface) 051313		1320	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-001 (0.5-1.0) 051313		1330	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-004 (Surface) 051313		1400	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-004 (0.5-1.0) 051313		1410	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-007 (Surface) 051313		1500	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-007 (0.5-1.0) 051313		1510	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-106 (Surface) 051313		1540	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-006 (0.5-1.0) 051313		1550	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-019 (Surface) 051313		0915	✓		✓			8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												
WS-TR41-051313			✓		✓			2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																												

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 14739

For Lancaster Laboratories use only  
 Group # 1389633 Sample # 7054733-58

Instructions on reverse side correspond with circled numbers.

Pg. 1 of 2

<b>1 Client Information</b>			<b>4 Matrix</b>		<b>5 Analyses Requested</b>						SCR#: _____		
Facility #/SID <u>Mayflower Pipe Incident</u>			Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	<b>Preservation Code</b>						<b>Preservation Codes</b>		
Site Address <u>Mayflower AR</u>					H <input type="checkbox"/> W <input type="checkbox"/> H <input type="checkbox"/>						H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other		
ExxonMobil PM <u>Scott + Buchroer</u>		Cost Center/AFE			Total # of Containers <u>8260B VOC</u> <u>PAH 8270 SIM</u> <u>PICRA Metals + N.V. Cont.</u> <u>Oil + Grease (HFM)</u>						<b>6 Remarks</b> <u>Data Analysis Question</u> <u>Lynd. Matt/ARLABS</u>		
Consultant/Office <u>ARCADIS</u>													
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-302-6799</u>											
Sampler <u>859-559-5060</u> <u>Tyler M. Brown/Anne Van Aller/Dave Frost</u>													
<b>2 Sample Identification</b>			<b>3</b>										
		<b>Collected</b>		Grab <input type="checkbox"/> Composite <input type="checkbox"/>									
		Date	Time										
WS-011(1.5-2.0)051313		5/13/13	1120	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-011(5.0-5.5)051313			0930	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-010(1.5-2.0)051313			1000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-012(1.5-2.0)051313			1030	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-012(4.5-5.0)051313			1040	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-014(1.5-2.0)051313			1120	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-014(4.0-4.5)051313			1130	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-018(1.0-1.5)051313			1230	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-FB-32-051313			1245	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-003(surface)051313		TA	0830	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-002(surface)051313		1000	0945	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WS-BK6-002(surface)051313		↓	1045	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>7 Turnaround Time Requested (TAT)</b> (please circle)			Relinquished by <u>Wm Oller</u>		Date	Time	Received by		Date	Time	<b>9</b>		
Standard      5 day      4 day					5/13/13	1730							
(72 hour)      48 hour      24 hour					Date	Time	Received by		Date	Time			
					Date	Time	Received by		Date	Time			
					Date	Time	Received by		Date	Time			
<b>8 Data Package</b> (circle if required)			<b>EDD</b> (circle if required)		Relinquished by Commercial Carrier						Received by		
Type I - Full			Locus EIM (default)		UPS _____ FedEx <input checked="" type="checkbox"/> Other _____						Date _____ Time _____		
Type VI (Raw Data)			Other _____		Temperature Upon Receipt _____ °C						Custody Seals Intact?      Yes      No		
NJ Reduced													
Other _____													

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

**Jill M. Parker**

---

**From:** Jill M. Parker  
**Sent:** Tuesday, May 14, 2013 3:39 PM  
**To:** 'Mott, Lyndi'  
**Cc:** Kathy Klinefelter  
**Subject:** Surface Water FB analysis from today's samples  
**Attachments:** 20130514152222337.pdf

Hello Lyndi,

I have attached the chain of custody for the surface water samples submitted today. Sample ID WS-FB-32-051313 is marked on the COC for all analyses but only a metals bottle was received for this sample. We will be unable to analyze this sample for VOCs, PAHs or Oil & Grease as requested on the COC.

Thank you,

Jill Parker  
Senior Project Manager, Env. Client Services

Eurofins Lancaster Laboratories, Inc.  
2425 New Holland Pike  
Lancaster, PA 17601  
Phone: 717-556-7262

Website: [www.LancasterLabsEnv.com](http://www.LancasterLabsEnv.com)

5/14/2013

Environmental Sample Administration  
Receipt Documentation Log

1389633

Client/Project: Exxon mobil  
Date of Receipt: 5.14.13  
Time of Receipt: 925  
Source Code: 50-1

Shipping Container Sealed:  YES NO

Custody Seal Present \* :  YES NO

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

Package:  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	2737	2.9	TB	WI	Y	B	
2	↓	1.1	↓	↓	↓	↓	
3	↓	0.9	↓	↓	↓	↓	
4	1396	3.4	ST	↓	↓	↓	
5	2737	0.5	TB	↓	↓	↓	
6	↓	0.6	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

WS FB-32 Rec 1 metals bottle only

Unpacker Signature/Emp#: Bruce My 2299 Date/Time: 5.14.13 1010



Environmental Sample Administration  
Receipt Documentation Log

1389633

Client/Project: Exxon Mobil  
 Date of Receipt: 5.14.13  
 Time of Receipt: 925  
 Source Code: 50-1

Shipping Container Sealed:  YES NO  
 Custody Seal Present \* :  YES NO  
 \* Custody seal was intact unless otherwise noted in the discrepancy section  
 Package:  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
17	2737	0.7	TB	WI	Y	B	
18	↓	0.5	↓	↓	↓	↓	
3	/						
4	/						
5	/						
6	/						

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

Paperwork Discrepancy/Unpacking Problems:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Unpacker Signature/Emp#: Bruno M 2299 Date/Time: 5.14.13 1010

Issued by Dept. 6042 Management

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	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.		
<b>&gt;</b>	greater than		
<b>J</b>	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
<b>ppm</b>	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.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>$ 25%	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	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.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.