

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 24, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/21/2013

Group Number: 1391308

SDG: PEH71

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)052013 Grab Surface Water	7063669
WS-011(5.5-6.0)052013 Grab Surface Water	7063670
WS-014(1.5-2.0)052013 Grab Surface Water	7063671
WS-014(4.5-5.0)052013 Grab Surface Water	7063672
WS-012(1.5-2.0)052013 Grab Surface Water	7063673
WS-012(5.0-5.5)052013 Grab Surface Water	7063674
WS-010(1.5-2.0)052013 Grab Surface Water	7063675
WS-010(4.0-4.5)052013 Grab Surface Water	7063676
WS-018(1.5-2.0)052013 Grab Surface Water	7063677
WS-FB-33-052013 Grab Surface Water	7063678
WS-003(Surface)052013 Grab Surface Water	7063679
WS-019(Surface)052013 Grab Surface Water	7063680
WS-BKG-002(Surface)052013 Grab Surface Water	7063681
WS-001(Surface)052013 Grab Surface Water	7063682
WS-001(0.5-1.0)052013 Grab Surface Water	7063683
WS-004(Surface)052013 Grab Surface Water	7063684
WS-004(0.5-1.0)052013 Grab Surface Water	7063685
WS-007(Surface)052013 Grab Surface Water	7063686
WS-007(0.5-1.0)052013 Grab Surface Water	7063687
WS-006(Surface)052013 Grab Surface Water	7063688
WS-006(0.5-1.0)052013 Grab Surface Water	7063689
WS-DUP-28-052013 Grab Surface Water	7063690
WS-TB-48-052013 Water	7063691
WS-002(Surface)052013 Grab Surface Water	7063692

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 #: 1391308

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: I131411AA (Sample number(s): 7063669-7063677, 7063679-7063687 UNSPK: 7063669)

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: 1,2-Dibromo-3-chloropropane

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13141WAM026 (Sample number(s): 7063669-7063677, 7063679-7063689)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7063680, 7063683, 7063684, 7063685, 7063686, 7063687

Batch #: 13141WAN026 (Sample number(s): 7063690, 7063692)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7063690

Sample #s: 7063669, 7063670, 7063671, 7063672, 7063673, 7063674, 7063675, 7063676, 7063677, 7063679, 7063681, 7063682, 7063688, 7063689

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for MS/MSD or MS/DUP analysis.

Sample #s: 7063692

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

Sample #s: 7063680, 7063683, 7063684, 7063685, 7063686, 7063687, 7063690

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

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

SW-846 6010B, Metals

Batch #: 131411848001 (Sample number(s): 7063669-7063688 UNSPK: 7063675 BKG: 7063675)

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

EPA 1664A, Wet Chemistry

Batch #: 13143807902A (Sample number(s): 7063680, 7063684-7063687, 7063690 UNSPK: P58195)

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

Sample #s: 7063669, 7063670, 7063671, 7063672, 7063673, 7063674, 7063675, 7063676, 7063677, 7063679, 7063680, 7063681, 7063682, 7063683, 7063684, 7063685, 7063686, 7063687, 7063688, 7063689, 7063690

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

Sample Description: WS-011(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063669
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:20 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20111 SDG#: PEH71-01

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)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063669**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 09:20 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20111 SDG#: PEH71-01

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0210	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-011(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063669
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:20 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20111 SDG#: PEH71-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.79	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.82	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00093	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 18:21	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 18:21	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 04:46	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:33	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 07:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-011(1.5-2.0)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063669
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20111 SDG#: PEH71-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-011(5.5-6.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063670
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:25 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20112 SDG#: PEH71-02

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(5.5-6.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063670**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 09:25 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20112 SDG#: PEH71-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.044 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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.3	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0216	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-011(5.5-6.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063670
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:25 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20112 SDG#: PEH71-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.85	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.86	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00095	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 18:42	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 18:42	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 05:14	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:37	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 07:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-011(5.5-6.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063670
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:25 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20112 SDG#: PEH71-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-014(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063671
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:55 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20141 SDG#: PEH71-03

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-014(1.5-2.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063671**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 09:55 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20141 SDG#: PEH71-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.041 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0179	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-014(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063671
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:55 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20141 SDG#: PEH71-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.55	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.73	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00028	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	2.3 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 19:03	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 19:03	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 05:43	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:49	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 07:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-014(1.5-2.0)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063671
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:55 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20141 SDG#: PEH71-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-014(4.5-5.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063672
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:00 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20142 SDG#: PEH71-04

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-014(4.5-5.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063672
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20142 SDG#: PEH71-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.032 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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0178	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-014(4.5-5.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063672
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:00 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20142 SDG#: PEH71-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.56	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.74	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00095	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 19:24	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 19:24	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 06:12	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:52	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-014(4.5-5.0)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063672
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20142 SDG#: PEH71-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-012(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063673
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20121 SDG#: PEH71-05

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(1.5-2.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063673**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 10:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20121 SDG#: PEH71-05

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0200	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-012(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063673
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:30 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20121 SDG#: PEH71-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.69	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0012 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00036	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 19:45	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 19:45	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 06:40	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:56	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-012(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063673
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:30 by JO ExxonMobil
Submitted: 05/21/2013 09:35 Mobil Pipeline Company
Reported: 05/24/2013 12:16 PO Box 4416
Houston TX 77210-4416

20121 SDG#: PEH71-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-012(5.0-5.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063674
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:35 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20122 SDG#: PEH71-06

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-012(5.0-5.5)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063674**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 10:35 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20122 SDG#: PEH71-06

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	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.045 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.5	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0198	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-012(5.0-5.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063674
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:35 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20122 SDG#: PEH71-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.70	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.76	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00031	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 20:05	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 20:05	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 07:09	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:00	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-012(5.0-5.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063674
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:35 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20122 SDG#: PEH71-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-010(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063675
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:15 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20101 SDG#: PEH71-07

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-010(1.5-2.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063675**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 11:15 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20101 SDG#: PEH71-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.065	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.4	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0278	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-010(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063675
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:15 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20101 SDG#: PEH71-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.85	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0021 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.89	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0022 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00074	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 20:26	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 20:26	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 07:38	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 18:10	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-010(1.5-2.0)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063675
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:15 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20101 SDG#: PEH71-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-010(4.0-4.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063676
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:20 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20102 SDG#: PEH71-08

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-010(4.0-4.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063676
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20102 SDG#: PEH71-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.066	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0276	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-010(4.0-4.5)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063676
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20102 SDG#: PEH71-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.81	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.84	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0015	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 20:47	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 20:47	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 08:07	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-010(4.0-4.5)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063676
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 11:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20102 SDG#: PEH71-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-018(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063677
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

2018- SDG#: PEH71-09

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

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

Sample Description: **WS-018(1.5-2.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063677**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 12:40 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

2018- SDG#: PEH71-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.065	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.9	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0264	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-018(1.5-2.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063677
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

2018- SDG#: PEH71-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	4.01	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.91	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00018 J	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 21:08	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 21:08	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 08:35	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:08	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-018(1.5-2.0)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063677
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

2018- SDG#: PEH71-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: **WS-FB-33-052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063678**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 11:45 by JO

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

Submitted: 05/21/2013 09:35

Reported: 05/24/2013 12:16

20F33 SDG#: PEH71-10FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	N.D.	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	N.D.	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
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013	21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013	19:12	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013	08:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013	11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013	15:30	Nelli S Markaryan	1

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

Sample Description: WS-003 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063679
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 08:20 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20003 SDG#: PEH71-11

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-003 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063679**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 08:20 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20003 SDG#: PEH71-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	0.067	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	18.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0255	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-003 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063679
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 08:20 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20003 SDG#: PEH71-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	4.02	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.96	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0011 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 21:29	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 21:29	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 09:04	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:16	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-003 (Surface) 052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063679
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 08:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20003 SDG#: PEH71-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-019 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063680
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:00 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20019 SDG#: PEH71-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	6.5	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	1.2 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-019 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063680**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 09:00 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20019 SDG#: PEH71-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL 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	12	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	0.1 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	0.1 J	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.2 J	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	0.021 J	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	0.013 J	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	0.028 J	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	0.015 J	0.011	0.057	1
08357	Fluorene	86-73-7	0.023 J	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	0.10	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	0.12	0.011	0.057	1
08357	Naphthalene	91-20-3	0.084	0.034	0.057	1
08357	Phenanthrene	85-01-8	0.039 J	0.034	0.057	1
08357	Pyrene	129-00-0	0.021 J	0.011	0.057	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l
06256	Total Hardness as CaCO3	471-34-1	203	0.064

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

Sample Description: WS-019 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063680
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:00 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20019 SDG#: PEH71-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0503	0.0068	0.0200	1
07046	Barium	7440-39-3	2.55	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0027 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	29.3	0.0640	0.200	1
07051	Chromium	7440-47-3	0.250	0.0011	0.0150	1
07055	Lead	7439-92-1	0.360	0.0051	0.0150	1
01757	Magnesium	7439-95-4	31.4	0.0606	0.100	1
07061	Nickel	7440-02-0	0.224	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.0107 J	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.376	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0012	0.00035	0.0010	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.4 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 21:49	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 21:49	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 09:33	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:19	Katlin N Cataldi	1

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

Sample Description: WS-019 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063680
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20019 SDG#: PEH71-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: **WS-BKG-002 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063681**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 10:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20BG2 SDG#: PEH71-13

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

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

Sample Description: **WS-BKG-002 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063681**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 10:30 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20BG2 SDG#: PEH71-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL purge						
02898	n-Propylbenzene	103-65-1	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Styrene	100-42-5	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0 ug/l	5.0 ug/l	1
02898	Toluene	108-88-3	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Trichloroethene	79-01-6	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3 ug/l	1.0 ug/l	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1 ug/l	0.5 ug/l	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1 ug/l	0.5 ug/l	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1 ug/l	0.5 ug/l	1
GC/MS Semivolatiles SW-846 8270C SIM						
08357	Acenaphthene	83-32-9	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Acenaphthylene	208-96-8	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Anthracene	120-12-7	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Chrysene	218-01-9	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Fluoranthene	206-44-0	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Fluorene	86-73-7	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010 ug/l	0.052 ug/l	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010 ug/l	0.052 ug/l	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010 ug/l	0.052 ug/l	1
08357	Naphthalene	91-20-3	0.047 J	0.031 ug/l	0.052 ug/l	1
08357	Phenanthrene	85-01-8	N.D.	0.031 ug/l	0.052 ug/l	1
08357	Pyrene	129-00-0	N.D.	0.010 ug/l	0.052 ug/l	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
06256	Total Hardness as CaCO3	471-34-1	40.3 mg/l	0.064 mg/l	0.20 mg/l	1
SW-846 6010B						
07035	Arsenic	7440-38-2	N.D.	0.0068 mg/l	0.0200 mg/l	1
07046	Barium	7440-39-3	0.0563 mg/l	0.00033 mg/l	0.0050 mg/l	1
07049	Cadmium	7440-43-9	N.D.	0.00036 mg/l	0.0050 mg/l	1

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

Sample Description: **WS-BKG-002 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063681**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 10:30 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20BG2 SDG#: PEH71-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	9.65	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0049 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.92	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0048 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	0.0074	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 22:10	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 22:10	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 10:02	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:23	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-BKG-002 (Surface) 052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063681
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 10:30 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20BG2 SDG#: PEH71-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-001(Surface)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063682
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20011 SDG#: PEH71-14

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)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063682
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20011 SDG#: PEH71-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	19.3	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0397	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(Surface)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063682
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:30 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20011 SDG#: PEH71-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	4.29	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0028 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.09	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0031 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	0.0037 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 22:31	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 22:31	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 10:30	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:35	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1

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

Sample Description: WS-001(Surface)052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063682
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:30 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20011 SDG#: PEH71-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-001(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063683
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20012 SDG#: PEH71-15

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)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063683**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 12:40 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20012 SDG#: PEH71-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.066	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	21.9	0.064	0.20	1

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

Sample Description: WS-001(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063683
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20012 SDG#: PEH71-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0969	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.57	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0086 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0120 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.56	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0081 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	0.0117	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 22:52	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 22:52	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 10:59	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:39	Katlin N Cataldi	1

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

Sample Description: WS-001(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063683
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 12:40 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20012 SDG#: PEH71-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-004(Surface)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063684
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20041 SDG#: PEH71-16

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

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

Sample Description: **WS-004(Surface)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063684**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 13:20 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20041 SDG#: PEH71-16

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	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	2.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	0.015 J	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.015 J	0.011	0.053	1
08357	Naphthalene	91-20-3	0.051 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	47.5	0.064	0.20	1

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

Sample Description: WS-004 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063684
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 13:20 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20041 SDG#: PEH71-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0196 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.330	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00045 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.40	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0447	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0924	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.45	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0356	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	0.0607	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00011 J	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 23:13	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 23:13	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 11:28	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:42	Katlin N Cataldi	1

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

Sample Description: WS-004(Surface)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063684
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20041 SDG#: PEH71-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: WS-004(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063685
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 13:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20042 SDG#: PEH71-17

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

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

Sample Description: **WS-004(0.5-1.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063685**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 13:30 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20042 SDG#: PEH71-17

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	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	3.3	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
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.016 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.015 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	53.6	0.064	0.20	1

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

Sample Description: WS-004(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063685
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 13:30 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20042 SDG#: PEH71-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0259	0.0068	0.0200	1
07046	Barium	7440-39-3	0.388	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00092 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	9.24	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0573	0.0011	0.0150	1
07055	Lead	7439-92-1	0.140	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.42	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0470	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	0.0761	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00011 J	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	3.3 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 23:34	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 23:34	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 11:57	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:46	Katlin N Cataldi	1

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

Sample Description: WS-004(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063685
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 13:30 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20042 SDG#: PEH71-17

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: WS-007 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063686
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:00 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20071 SDG#: PEH71-18

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

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

Sample Description: **WS-007 (Surface) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063686**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 14:00 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20071 SDG#: PEH71-18

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	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	3.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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	0.015 J	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.011 J	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.037 J	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	0.012 J	0.010	0.050	1
08357	Chrysene	218-01-9	0.033 J	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	0.057	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	0.013 J	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.011 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.017 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.051	0.010	0.050	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	49.5	0.064	0.20	1

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

Sample Description: WS-007 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063686
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:00 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20071 SDG#: PEH71-18

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0232	0.0068	0.0200	1
07046	Barium	7440-39-3	0.360	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00053 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.97	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0470	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0449	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.18	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0382	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	0.0671	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000088 J	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	2.0 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/21/2013 23:55	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/21/2013 23:55	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 19:15	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1

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

Sample Description: WS-007 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063686
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20071 SDG#: PEH71-18

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:50	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: WS-007(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063687
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:10 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20072 SDG#: PEH71-19

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

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

Sample Description: **WS-007(0.5-1.0)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063687**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 14:10 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20072 SDG#: PEH71-19

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	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	22	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	0.015 J	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.032 J	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.039 J	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.11	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.031 J	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.037 J	0.010	0.050	1
08357	Chrysene	218-01-9	0.047 J	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	0.080	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	0.038 J	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.089	0.010	0.050	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	67.3	0.064	0.20	1

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

Sample Description: WS-007(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063687
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:10 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20072 SDG#: PEH71-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0306	0.0068	0.0200	1
07046	Barium	7440-39-3	0.600	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0011 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	11.2	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0610	0.0011	0.0150	1
07055	Lead	7439-92-1	0.123	0.0051	0.0150	1
01757	Magnesium	7439-95-4	9.55	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0558	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	0.100	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00021	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.6 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	I131411AA	05/22/2013 00:16	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131411AA	05/22/2013 00:16	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 19:44	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1

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

Sample Description: WS-007(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063687
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:10 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20072 SDG#: PEH71-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:54	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: WS-006 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063688
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:40 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20061 SDG#: PEH71-20

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) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063688**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 14:40 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20061 SDG#: PEH71-20

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	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.039 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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	18.4	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0361	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063688
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:40 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20061 SDG#: PEH71-20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	4.08	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.00	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0022 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0030 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	H131412AA	05/21/2013 22:35	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131412AA	05/21/2013 22:35	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 20:12	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256002	05/21/2013 21:24	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131411848001	05/21/2013 19:58	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131415713001	05/22/2013 08:48	Damary Valentin	1

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

Sample Description: WS-006 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063688
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:40 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20061 SDG#: PEH71-20

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	131411848001	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713001	05/21/2013 15:30	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: WS-006(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063689
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:50 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20062 SDG#: PEH71-21

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	0.7	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)052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063689**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 14:50 by **JO** ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20062 SDG#: PEH71-21

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	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.011 J	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	0.025 J	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	0.029 J	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	0.030 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	0.056	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.021 J	0.010	0.050	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	23.5	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0073 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0889	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063689
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:50 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20062 SDG#: PEH71-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	4.79	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0079 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0123 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0079 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	0.0129	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	H131412AA	05/22/2013 00:21	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131412AA	05/22/2013 00:21	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAM026	05/23/2013 20:41	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAM026	05/22/2013 10:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256001	05/21/2013 19:21	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07046	Barium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
01750	Calcium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07051	Chromium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07055	Lead	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07061	Nickel	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07036	Selenium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07066	Silver	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131411848002	05/21/2013 18:27	John P Hook	1
00259	Mercury	SW-846 7470A	1	131415713002	05/22/2013 08:56	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063689
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 14:50 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/21/2013 09:35

PO Box 4416

Reported: 05/24/2013 12:16

Houston TX 77210-4416

20062 SDG#: PEH71-21

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	131411848002	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713002	05/21/2013 17:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13141807902A	05/21/2013 16:50	Clayton C Litchmore	1

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

Sample Description: **WS-DUP-28-052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063690**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 by JO

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

Submitted: 05/21/2013 09:35

Reported: 05/24/2013 12:16

20D28 SDG#: PEH71-22FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	3.2 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-DUP-28-052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063690**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 by JO

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

Submitted: 05/21/2013 09:35

Reported: 05/24/2013 12:16

20D28 SDG#: PEH71-22FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	2.1	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.014 J	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.011 J	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.035 J	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.013 J	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.012 J	0.011	0.053	1
08357	Chrysene	218-01-9	0.024 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	0.060	0.011	0.053	1
08357	Fluorene	86-73-7	0.014 J	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.014 J	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.016 J	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.050 J	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.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	49.2	0.064	0.20	1

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

Sample Description: **WS-DUP-28-052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063690**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 by JO

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

Submitted: 05/21/2013 09:35

Reported: 05/24/2013 12:16

20D28 SDG#: PEH71-22FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0140 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.350	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00048 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.95	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0460	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0418	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.12	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0377	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0654	0.0013	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	H131412AA	05/22/2013 01:26	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131412AA	05/22/2013 01:26	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAN026	05/23/2013 16:22	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAN026	05/22/2013 10:40	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256001	05/21/2013 19:21	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07046	Barium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
01750	Calcium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07051	Chromium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07055	Lead	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07061	Nickel	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07036	Selenium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
07066	Silver	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1

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

Sample Description: WS-DUP-28-052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063690
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20D28 SDG#: PEH71-22FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010B	1	131411848002	05/21/2013 18:39	John P Hook	1
00259	Mercury	SW-846 7470A	1	131415713002	05/22/2013 09:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848002	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713002	05/21/2013 17:15	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13143807902A	05/23/2013 09:26	Yolunder Y Bunch	1

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

Sample Description: **WS-TB-48-052013 Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063691**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20T48 SDG#: PEH71-23TB

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-TB-48-052013 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063691
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20T48 SDG#: PEH71-23TB

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	H131412AA	05/22/2013 00:01	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131412AA	05/22/2013 00:01	Kevin A Sposito	1

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

Sample Description: WS-002 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063692
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:40 by JO

ExxonMobil

Submitted: 05/21/2013 09:35

Mobil Pipeline Company

Reported: 05/24/2013 12:16

PO Box 4416

Houston TX 77210-4416

20002 SDG#: PEH71-24*

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) 052013 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7063692**
 LLI Group # **1391308**
 Account # **14739**

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

Collected: 05/20/2013 09:40 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20002 SDG#: PEH71-24*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.035 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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.2	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0174	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-002 (Surface) 052013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7063692
LLI Group # 1391308
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:40 by JO ExxonMobil
Mobil Pipeline Company
Submitted: 05/21/2013 09:35 PO Box 4416
Reported: 05/24/2013 12:16 Houston TX 77210-4416

20002 SDG#: PEH71-24*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.83	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.87	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131412AA	05/22/2013 01:47	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131412AA	05/22/2013 01:47	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13141WAN026	05/23/2013 16:51	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13141WAN026	05/22/2013 10:40	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131416256001	05/21/2013 19:21	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07046	Barium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
01750	Calcium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07051	Chromium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07055	Lead	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07061	Nickel	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07036	Selenium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07066	Silver	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131411848002	05/21/2013 18:00	John P Hook	1
00259	Mercury	SW-846 7470A	1	131415713002	05/22/2013 09:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131411848002	05/21/2013 11:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131415713002	05/21/2013 17:15	Nelli S Markaryan	1

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

Sample Description: WS-002 (Surface) 052013 Grab Surface Water
 Mayflower, AR
 Pipeline Incident

LLI Sample # WW 7063692
 LLI Group # 1391308
 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/20/2013 09:40 by JO ExxonMobil
 Submitted: 05/21/2013 09:35 Mobil Pipeline Company
 Reported: 05/24/2013 12:16 PO Box 4416
 Houston TX 77210-4416

20002 SDG#: PEH71-24*

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	13142807901A	05/22/2013 17:36	Michelle L Lalli	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/24/13 at 12:16 PM

Group Number: 1391308

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: H131412AA	Sample number(s): 7063688-7063692								
Acetone	N.D.	3.0	5.0	ug/l	101		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	93		61-130		
Benzene	N.D.	0.1	0.5	ug/l	97		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	96		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	96		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	95		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	92		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	105		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	98		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	96		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	98		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	88		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	101		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	98		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	95		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	99		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	72		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	101		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	97		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	99		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	103		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	96		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	95		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	89		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	100		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	95		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	90		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: 1391308

Reported: 05/24/13 at 12:16 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	98		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	97		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	99		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	98		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Styrene	N.D.	0.1	0.5	ug/l	102		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	97		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	103		65-131		
Toluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	91		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	94		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	97		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	96		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	92		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	102		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	90		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	99		80-120		

Batch number: I131411AA

Sample number(s): 7063669-7063677,7063679-7063687

Acetone	N.D.	3.0	5.0	ug/l	78		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	102		61-130		
Benzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	98		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	103		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	111		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	91		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	98		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	99		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	93		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	99		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	89		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	100		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	105		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	111		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	69		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	102		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		

*- 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: 1391308

Reported: 05/24/13 at 12:16 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>LCS D %REC</u>	<u>LCS/LCS D Limits</u>	<u>RPD</u>	<u>RPD Max</u>
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	105		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	105		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	110		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	100		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	103		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	100		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	98		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	96		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	97		61-125		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	104		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	101		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	116		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	101		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Styrene	N.D.	0.1	0.5	ug/l	110		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	112		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	98		65-131		
Toluene	N.D.	0.1	0.5	ug/l	103		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	98		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	98		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	111		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	98		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	87		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	105		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	93		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	104		80-120		

Batch number: 13141WAM026

Sample number(s): 7063669-7063677, 7063679-7063689

Acenaphthene	N.D.	0.010	0.050	ug/l	101	100	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	104	103	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	102	101	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	101	101	75-115	0	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	102	103	72-120	2	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	113	115	74-130	2	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	104	107	63-121	3	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	107	109	74-118	2	30
Chrysene	N.D.	0.010	0.050	ug/l	104	106	75-112	2	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	98	105	66-122	8	30
Fluoranthene	N.D.	0.010	0.050	ug/l	105	105	73-116	0	30
Fluorene	N.D.	0.010	0.050	ug/l	102	100	74-115	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	106	109	66-122	3	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107	106	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104	104	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	102	101	67-118	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	101	100	72-109	1	30
Pyrene	N.D.	0.010	0.050	ug/l	98	98	71-116	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

Group Number: 1391308

Reported: 05/24/13 at 12:16 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max	
Batch number: 13141WAN026										
Sample number(s): 7063690,7063692										
Acenaphthene	N.D.	0.010	0.050	ug/l	102	100	65-124	2	30	
Acenaphthylene	N.D.	0.010	0.050	ug/l	106	103	72-113	3	30	
Anthracene	N.D.	0.010	0.050	ug/l	110	92	70-117	17	30	
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	107	101	75-115	5	30	
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	101	99	72-120	2	30	
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	117	112	74-130	4	30	
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	111	89	63-121	22	30	
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	108	105	74-118	3	30	
Chrysene	N.D.	0.010	0.050	ug/l	106	102	75-112	4	30	
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	105	78	66-122	29	30	
Fluoranthene	N.D.	0.010	0.050	ug/l	106	103	73-116	3	30	
Fluorene	N.D.	0.010	0.050	ug/l	106	110	74-115	4	30	
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	108	85	66-122	24	30	
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	106	104	72-114	2	30	
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104	102	74-119	2	30	
Naphthalene	N.D.	0.030	0.050	ug/l	100	98	67-118	2	30	
Phenanthrene	N.D.	0.030	0.050	ug/l	103	95	72-109	8	30	
Pyrene	N.D.	0.010	0.050	ug/l	113	102	71-116	10	30	
Batch number: 131411848001										
Sample number(s): 7063669-7063688										
Arsenic	N.D.	0.0068	0.0200	mg/l		99	90-113			
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110			
Cadmium	N.D.	0.00036	0.0050	mg/l	101		90-112			
Calcium	N.D.	0.0640	0.200	mg/l	101		90-110			
Chromium	N.D.	0.0011	0.0150	mg/l	103		90-110			
Lead	N.D.	0.0051	0.0150	mg/l	106		88-110			
Magnesium	N.D.	0.0606	0.100	mg/l	99		90-110			
Nickel	N.D.	0.0011	0.0100	mg/l	105		90-111			
Selenium	N.D.	0.0075	0.0200	mg/l	98		80-120			
Silver	N.D.	0.0012	0.0050	mg/l	95		80-120			
Vanadium	N.D.	0.0013	0.0050	mg/l	103		90-110			
Batch number: 131411848002										
Sample number(s): 7063689-7063690,7063692										
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113			
Barium	N.D.	0.00033	0.0050	mg/l	103		90-110			
Cadmium	N.D.	0.00036	0.0050	mg/l	105		90-112			
Calcium	N.D.	0.0640	0.200	mg/l	103		90-110			
Chromium	N.D.	0.0011	0.0150	mg/l	101		90-110			
Lead	N.D.	0.0051	0.0150	mg/l	104		88-110			
Magnesium	N.D.	0.0606	0.100	mg/l	102		90-110			
Nickel	N.D.	0.0011	0.0100	mg/l	107		90-111			
Selenium	N.D.	0.0075	0.0200	mg/l	97		80-120			
Silver	N.D.	0.0012	0.0050	mg/l	95		80-120			
Vanadium	N.D.	0.0013	0.0050	mg/l	105		90-110			
Batch number: 131415713001										
Sample number(s): 7063669-7063688										
Mercury	N.D.	0.00007	0.00020	mg/l	97		80-120			
		0								
Batch number: 131415713002										
Sample number(s): 7063689-7063690,7063692										
Mercury	N.D.	0.00007	0.00020	mg/l	95		80-120			
		0								
Batch number: 13141807902A										
Sample number(s): 7063669-7063677,7063679,7063681-7063683,7063688-7063689										
HEM (oil & grease)	1.6	J	1.4	5.0	mg/l	106	102	78-114	4	16

*- 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: 1391308

Reported: 05/24/13 at 12:16 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 13142807901A HEM (oil & grease)	Sample number(s): 7063692 N.D.	1.4	5.0	mg/l	84	89	78-114	6	16
Batch number: 13143807902A HEM (oil & grease)	Sample number(s): 7063680,7063684-7063687,7063690 N.D.	1.4	5.0	mg/l	99	110	78-114	11	16

Sample Matrix Quality Control

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

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: H131412AA	Sample number(s): 7063688-7063692 UNSPK: 7063688								
Acetone	105	107	57-163	1	30				
Allyl Chloride	105	108	67-139	3	30				
Benzene	107	109	87-126	2	30				
Bromobenzene	103	109	80-123	6	30				
Bromochloromethane	103	107	82-125	4	30				
Bromodichloromethane	102	107	82-133	5	30				
Bromoform	100	106	60-138	6	30				
Bromomethane	100	102	41-145	2	30				
2-Butanone	97	100	63-146	3	30				
n-Butylbenzene	107	108	83-131	0	30				
sec-Butylbenzene	108	109	84-128	1	30				
tert-Butylbenzene	108	114	84-135	5	30				
Carbon Tetrachloride	111	113	81-148	1	30				
Chlorobenzene	108	112	78-133	4	30				
Chloroethane	103	106	70-139	3	30				
Chloroform	107	111	86-136	4	30				
Chloromethane	97	99	55-152	2	30				
2-Chlorotoluene	106	110	81-120	3	30				
4-Chlorotoluene	108	111	82-119	2	30				
1,2-Dibromo-3-chloropropane	91	92	43-143	1	30				
Dibromochloromethane	102	108	79-125	5	30				
1,2-Dibromoethane	102	107	84-127	5	30				
Dibromomethane	103	107	83-126	3	30				
1,2-Dichlorobenzene	106	110	83-117	3	30				
1,3-Dichlorobenzene	107	111	81-118	4	30				
1,4-Dichlorobenzene	105	110	79-120	4	30				
Dichlorodifluoromethane	84	80	28-136	4	30				
1,1-Dichloroethane	109	115	88-136	5	30				
1,2-Dichloroethane	103	109	82-135	6	30				
1,1-Dichloroethene	114	119	83-150	4	30				
cis-1,2-Dichloroethene	105	110	82-129	4	30				
trans-1,2-Dichloroethene	109	114	88-127	5	30				
Dichlorofluoromethane	115	117	59-176	2	30				
1,2-Dichloropropane	108	112	91-126	4	30				
1,3-Dichloropropane	103	108	80-127	4	30				
2,2-Dichloropropane	109	114	80-134	4	30				
1,1-Dichloropropene	109	112	86-139	2	30				
cis-1,3-Dichloropropene	103	109	74-132	5	30				

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/24/13 at 12:16 PM

Group Number: 1391308

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>
trans-1,3-Dichloropropene	95	103	71-128	7	30				
Ethyl ether	105	107	67-127	2	30				
Ethylbenzene	109	111	80-140	2	30				
Freon 113	112	108	87-158	4	30				
Hexachlorobutadiene	104	101	65-128	2	30				
Isopropylbenzene	109	110	81-133	1	30				
p-Isopropyltoluene	109	111	84-124	2	30				
Methyl Tertiary Butyl Ether	103	108	82-132	5	30				
4-Methyl-2-Pentanone	103	111	69-149	8	30				
Methylene Chloride	105	111	84-122	6	30				
n-Propylbenzene	110	111	79-131	1	30				
Styrene	108	111	63-151	4	30				
1,1,1,2-Tetrachloroethane	107	111	87-126	4	30				
1,1,2,2-Tetrachloroethane	102	106	75-131	4	30				
Tetrachloroethene	110	112	75-129	2	30				
Tetrahydrofuran	95	96	56-154	1	30				
Toluene	107	112	83-127	4	30				
1,2,3-Trichlorobenzene	99	103	73-125	4	30				
1,2,4-Trichlorobenzene	102	104	77-120	2	30				
1,1,1-Trichloroethane	111	114	85-140	3	30				
1,1,2-Trichloroethane	104	111	85-129	6	30				
Trichloroethene	107	112	85-131	4	30				
Trichlorofluoromethane	107	106	67-161	1	30				
1,2,3-Trichloropropane	100	104	76-120	3	30				
1,2,4-Trimethylbenzene	107	109	87-126	2	30				
1,3,5-Trimethylbenzene	108	111	89-129	3	30				
Vinyl Chloride	105	103	65-151	1	30				
Xylene (Total)	109	111	81-137	2	30				

Batch number: I131411AA	Sample number(s): 7063669-7063677,7063679-7063687 UNSPK: 7063669
Acetone	106 89 57-163 17 30
Allyl Chloride	109 110 67-139 1 30
Benzene	108 104 87-126 4 30
Bromobenzene	106 98 80-123 8 30
Bromochloromethane	103 106 82-125 2 30
Bromodichloromethane	109 108 82-133 2 30
Bromoform	107 108 60-138 1 30
Bromomethane	99 102 41-145 3 30
2-Butanone	142 106 63-146 29 30
n-Butylbenzene	111 100 83-131 10 30
sec-Butylbenzene	115 102 84-128 12 30
tert-Butylbenzene	112 100 84-135 12 30
Carbon Tetrachloride	112 102 81-148 9 30
Chlorobenzene	109 101 78-133 8 30
Chloroethane	101 104 70-139 4 30
Chloroform	106 106 86-136 1 30
Chloromethane	98 102 55-152 5 30
2-Chlorotoluene	109 98 81-120 11 30
4-Chlorotoluene	109 98 82-119 10 30
1,2-Dibromo-3-chloropropane	137 94 43-143 37* 30
Dibromochloromethane	107 106 79-125 1 30
1,2-Dibromoethane	113 111 84-127 1 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: 05/24/13 at 12:16 PM

Group Number: 1391308

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>
Dibromomethane	107	107	83-126	0	30				
1,2-Dichlorobenzene	106	99	83-117	8	30				
1,3-Dichlorobenzene	109	99	81-118	10	30				
1,4-Dichlorobenzene	107	99	79-120	8	30				
Dichlorodifluoromethane	79	69	28-136	12	30				
1,1-Dichloroethane	110	109	88-136	1	30				
1,2-Dichloroethane	111	110	82-135	1	30				
1,1-Dichloroethene	112	108	83-150	4	30				
cis-1,2-Dichloroethene	107	105	82-129	2	30				
trans-1,2-Dichloroethene	109	104	88-127	4	30				
Dichlorofluoromethane	112	119	59-176	6	30				
1,2-Dichloropropane	112	110	91-126	2	30				
1,3-Dichloropropane	112	112	80-127	1	30				
2,2-Dichloropropane	105	102	80-134	3	30				
1,1-Dichloropropene	112	102	86-139	10	30				
cis-1,3-Dichloropropene	103	104	74-132	1	30				
trans-1,3-Dichloropropene	101	100	71-128	1	30				
Ethyl ether	103	104	67-127	1	30				
Ethylbenzene	112	102	80-140	9	30				
Freon 113	105	94	87-158	11	30				
Hexachlorobutadiene	104	95	65-128	9	30				
Isopropylbenzene	114	102	81-133	10	30				
p-Isopropyltoluene	113	101	84-124	11	30				
Methyl Tertiary Butyl Ether	104	110	82-132	6	30				
4-Methyl-2-Pentanone	111	118	69-149	6	30				
Methylene Chloride	108	110	84-122	2	30				
n-Propylbenzene	114	101	79-131	12	30				
Styrene	115	107	63-151	7	30				
1,1,1,2-Tetrachloroethane	108	104	87-126	4	30				
1,1,2,2-Tetrachloroethane	113	112	75-131	1	30				
Tetrachloroethene	109	99	75-129	10	30				
Tetrahydrofuran	142	105	56-154	30	30				
Toluene	110	103	83-127	7	30				
1,2,3-Trichlorobenzene	100	94	73-125	6	30				
1,2,4-Trichlorobenzene	104	97	77-120	7	30				
1,1,1-Trichloroethane	109	102	85-140	7	30				
1,1,2-Trichloroethane	114	113	85-129	1	30				
Trichloroethene	107	100	85-131	7	30				
Trichlorofluoromethane	101	92	67-161	10	30				
1,2,3-Trichloropropane	105	107	76-120	2	30				
1,2,4-Trimethylbenzene	111	101	87-126	9	30				
1,3,5-Trimethylbenzene	111	100	89-129	10	30				
Vinyl Chloride	104	105	65-151	0	30				
Xylene (Total)	112	103	81-137	8	30				

Batch number: 131411848001

Sample number(s): 7063669-7063688 UNSPK: 7063675 BKG: 7063675

Arsenic	102	102	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	104	104	78-118	0	20	0.0278	0.0288	4	20
Cadmium	102	102	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	103	104	81-118	1	20	3.85	3.88	1	20
Chromium	104	104	81-120	0	20	0.0021 J	0.0019 J	7 (1)	20
Lead	107	108	75-125	1	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/24/13 at 12:16 PM

Group Number: 1391308

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</u> <u>RPD</u> <u>Max</u>
Magnesium	101	104	75-125	1	20	1.89	1.91	1	20
Nickel	107	106	86-115	1	20	0.0013 J	0.0017 J	26* (1)	20
Selenium	98	98	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	95	94	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	104	104	90-111	0	20	0.0022 J	0.0023 J	8 (1)	20
Batch number: 131411848002 Sample number(s): 7063689-7063690,7063692 UNSPK: 7063692 BKG: 7063692									
Arsenic	104	104	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	102	102	78-118	0	20	0.0174	0.0171	2 (1)	20
Cadmium	104	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	98	99	81-118	1	20	3.83	3.74	2	20
Chromium	101	101	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	104	104	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	99	98	75-125	0	20	1.87	1.85	1	20
Nickel	107	107	86-115	0	20	0.0013 J	0.0011 J	15 (1)	20
Selenium	97	100	75-125	3	20	N.D.	N.D.	0 (1)	20
Silver	95	95	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	105	105	90-111	0	20	N.D.	N.D.	0 (1)	20
Batch number: 131415713001 Sample number(s): 7063669-7063688 UNSPK: 7063673 BKG: 7063673									
Mercury	92	93	80-120	1	20	0.00036	0.00035	0 (1)	20
Batch number: 131415713002 Sample number(s): 7063689-7063690,7063692 UNSPK: 7063689 BKG: 7063689									
Mercury	104	105	80-120	1	20	N.D.	N.D.	0 (1)	20
Batch number: 13141807902A Sample number(s): 7063669-7063677,7063679,7063681-7063683,7063688-7063689 UNSPK: 7063682									
HEM (oil & grease)	88		78-114						
Batch number: 13142807901A Sample number(s): 7063692 UNSPK: P061567									
HEM (oil & grease)	86		78-114						
Batch number: 13143807902A Sample number(s): 7063680,7063684-7063687,7063690 UNSPK: P058195									
HEM (oil & grease)	59*		78-114						

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: H131412AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7063688	99	99	101	98
7063689	100	100	100	98
7063690	100	101	101	99
7063691	100	99	101	98
7063692	99	101	102	99

*- 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: 05/24/13 at 12:16 PM

Group Number: 1391308

Surrogate Quality Control

Blank	100	99	100	98
LCS	98	96	102	101
MS	100	98	102	100
MSD	100	101	102	101

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

Analysis Name: NHDES VOCs 25ml purge

Batch number: I131411AA

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

7063669	99	109	101	98
7063670	99	108	100	99
7063671	99	106	100	98
7063672	99	107	100	99
7063673	100	111	100	99
7063674	100	110	99	98
7063675	100	111	100	98
7063676	99	106	100	98
7063677	100	106	100	98
7063679	100	107	99	97
7063680	99	104	100	98
7063681	100	112	99	99
7063682	100	109	99	98
7063683	101	108	100	98
7063684	100	108	99	98
7063685	102	111	100	99
7063686	100	106	100	98
7063687	101	107	99	98
Blank	99	108	99	98
LCS	98	104	101	101
MS	99	106	101	101
MSD	99	108	101	101

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

Analysis Name: PAHs in waters by SIM

Batch number: 13141WAM026

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

7063669	100	82	95
7063670	104	87	101
7063671	103	92	96
7063672	93	82	87
7063673	97	84	92
7063674	104	93	100
7063675	102	92	97
7063676	85	75	75
7063677	103	88	93
7063679	104	88	98
7063680	27*	24*	40*
7063681	95	89	92
7063682	92	77	89
7063683	67	37*	80
7063684	30*	10*	65

*- 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: 05/24/13 at 12:16 PM

Group Number: 1391308

Surrogate Quality Control

7063685	30*	15*	47*
7063686	32*	16*	65
7063687	21*	13*	37*
7063688	96	81	120
7063689	94	71	105
Blank	97	100	96
LCS	98	99	101
LCSD	99	104	101

Limits: 64-120 62-141 58-134

Analysis Name: PAHs in waters by SIM
Batch number: 13141WAN026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7063690	39*	25*	50*
7063692	104	88	104
Blank	111	98	100
LCS	103	107	105
LCSD	101	101	103

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

For Eurofins Lancaster Laboratories use only
 Group # 1391308 Sample # 7063669-92
 Instructions on reverse side correspond with circled numbers.

P. 2012

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks							
Facility #/SID <u>May Tower Pipeline Incident</u>				Soil <input type="checkbox"/>	Water <input type="checkbox"/>	Oil <input type="checkbox"/>	Total # of Containers	Preservation Code										Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other							
Site Address <u>May Tower, AR</u>								Sediment <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input checked="" type="checkbox"/>	Potable <input type="checkbox"/>	NPDES <input type="checkbox"/>	Air <input type="checkbox"/>	H	N	H									
ExxonMobil PM <u>Scott Bushae</u>		Cost Center/AFE																							
Consultant/Office <u>ARCADIS US</u>																									
Consultant PM <u>Steve Barnick</u>		Consultant Phone # <u>919-302-6799</u>																							
Sampler <u>Joshua Oliver / Hans VanAlst</u> <u>315-857-5793</u>																									
2 Sample Identification			3 Collected		Grab	Composite																			
Date	Time																								
<u>WS-BKG-002-052013</u>	<u>5/20/13</u>	<u>1030</u>	<input checked="" type="checkbox"/>																						
<u>WS-001 (surface) 052013</u>		<u>1230</u>																							
<u>WS-001 (0.5-1.0) 052013</u>		<u>1240</u>																							
<u>WS-004 (surface) 052013</u>		<u>1320</u>																							
<u>WS-004 (0.5-1.0) 052013</u>		<u>1330</u>																							
<u>WS-007 (surface) 052013</u>		<u>1400</u>																							
<u>WS-007 (0.5-1.0) 052013</u>		<u>1410</u>																							
<u>WS-006 (surface) 052013</u>		<u>1440</u>																							
<u>WS-006 (0.5-1.0) 052013</u>		<u>1450</u>																							
<u>WS-DUP-28-052013</u>																									
<u>WS-TB-48-052013</u>																									

14739 1391308 7063069-692

Jill M. Parker

From: Mott, Lyndi [Lyndi.Mott@arcadis-us.com]
Sent: Tuesday, May 21, 2013 1:10 PM
To: Jill M. Parker
Cc: Kathy Klinefelter; Oliver, Joshua; Van Aller, Hans; Lipka, Shelby; Chandler, Jennifer; Kull, Valerie; Patel, Dakshesh
Subject: RE: Grp 1391308, PEH71 - Additional Sample received

Yes please.

Thank you,
 Lyndi Mott

From: Jill M. Parker [mailto:JMParker@lancasterlabs.com]
Sent: Tuesday, May 21, 2013 12:08 PM
To: Mott, Lyndi
Cc: Kathy Klinefelter; Oliver, Joshua; Van Aller, Hans; Lipka, Shelby; Chandler, Jennifer; Kull, Valerie; Patel, Dakshesh
Subject: RE: Grp 1391308, PEH71 - Additional Sample received

Thanks Lyndi. I just took an additional look at the paperwork and we did also receive HEM/Oil & Grease containers for this additional sample. Should we still just enter for the analyses listed below or also include HEM? Sorry I didn't catch this prior to sending my original email.

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

From: Mott, Lyndi [mailto:Lyndi.Mott@arcadis-us.com]
Sent: Tuesday, May 21, 2013 1:06 PM
To: Jill M. Parker
Cc: Kathy Klinefelter; Oliver, Joshua; Van Aller, Hans; Lipka, Shelby; Chandler, Jennifer; Kull, Valerie; Patel, Dakshesh
Subject: RE: Grp 1391308, PEH71 - Additional Sample received

Jill,

Please login the sample WS-002(Surface)052013 for VOCs by 8260, PAHs by 8270 SIM, and RCRA metals plus calcium, magnesium, Hardness calculation, and Nickel & vanadium.

Thank you,

Lyndi Mott | Project Chemistry/Data Quality Specialist | lyndi.mott@arcadis-us.com
 ARCADIS U.S., Inc. | 2929 Briarpark Drive | Suite 300 | Houston, TX 77042
 T. 713.953.4829 | T. 832.534.8140 | M. 315.569.9448
www.arcadis-us.com

5/21/2013

14739 1391308 7063669-692

ARCADIS, Imagine the result
Please consider the environment before printing this email.



From: Jill M. Parker [<mailto:JMParker@lancasterlabs.com>]
Sent: Tuesday, May 21, 2013 11:59 AM
To: Mott, Lyndi
Cc: Kathy Klinefelter
Subject: Grp 1391308, PEH71 - Additional Sample received

Hello Lyndi,

Attached is the Surface Water COC received today. There was an extra sample in the cooler (WS-002(Surface) 052013, 5/20/13 @ 0940) that was not listed on the COC. Please confirm that it should be analyzed for 8260 VOCs, PAHs and metals as well.

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

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5/21/2013

Environmental Sample Administration Receipt Documentation Log

Client/Project: XOM mayflower

Shipping Container Sealed: YES NO

Date of Receipt: 5/21/13

Custody Seal Present * : YES NO

Time of Receipt: 0935

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

Source Code: 50-1

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	DT121	1.2	TB	WI	Y	B	
2	↓	2.1	↓	↓	↓	↓	
3	↓	1.3	↓	↓	↓	↓	
4	↓	0.6	↓	↓	↓	↓	
5	↓	0.4	↓	↓	↓	↓	
6	↓	0.7	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Additional sample: WS-002(SURFACE)052013 } 8 containers
5/20/13 @ 0940 by JW

Unpacker Signature/Emp#: W. Neslund / 208 Date/Time: 5/21/13 / 1000

Environmental Sample Administration
Receipt Documentation Log

Client/Project: XOM Mayflower
 Date of Receipt: 5/21/13
 Time of Receipt: 0935
 Source Code: SO-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
7x	DT121	0.9	TB	WI	Y	B	
8x	1396	4.1	ST	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Sadslund / 208 Date/Time: 5/21/13 / 1000

Issued by Dept. 6042 Management

2174.06

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers	Inorganic Qualifiers
A TIC is a possible aldol-condensation product	B Value is $<$ CRDL, but \geq IDL
B Analyte was also detected in the blank	E Estimated due to interference
C Pesticide result confirmed by GC/MS	M Duplicate injection precision not met
D Compound quantitated on a diluted sample	N Spike sample not within control limits
E Concentration exceeds the calibration range of the instrument	S Method of standard additions (MSA) used for calculation
N Presumptive evidence of a compound (TICs only)	U Compound was not detected
P Concentration difference between primary and confirmation columns $>$ 25%	W Post digestion spike out of control limits
U Compound was not detected	* Duplicate analysis not within control limits
X,Y,Z Defined in case narrative	+ Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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