

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

June 26, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/15/2013

Group Number: 1397455

SDG: PEI23

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(Surface)061413 Grab Surface Water	7094713
WS-002(Surface)061413 Grab Surface Water	7094714
WS-005(Surface)061413 Grab Surface Water	7094715
WS-001(Surface)061413 Grab Surface Water	7094716
WS-001(0.5-1.0)061413 Grab Surface Water	7094717
WS-004(Surface)061413 Grab Surface Water	7094718
WS-004(0.5-1.0)061413 Grab Surface Water	7094719
WS-007(Surface)061413 Grab Surface Water	7094720
WS-007(Surface)061413 MS Grab Surface Water	7094721
WS-007(Surface)061413 MSD Grab Surface Water	7094722
WS-007(Surface)061413 DUP Grab Surface Water	7094723
WS-007(0.5-1.0)061413 Grab Surface Water	7094724
WS-006(Surface)061413 Grab Surface Water	7094725
WS-006(0.5-1.0)061413 Grab Surface Water	7094726
WS-TB-73-061413 Water	7094727

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: Michael J. Firth

ELECTRONIC COPY TO
ARCADIS

Attn: Emily Leamer

REVISED

ELECTRONIC ARCADIS
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COPY TO

Attn: Rhiannon Parmalee

Attn: Jamie Pritchard

Attn: Michael L Sixsmith

Attn: Julie Foster

Attn: Carl Wideman

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1397455

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

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

Batch #: 13168WAD026 (Sample number(s): 7094713-7094722, 7094724-7094726 UNSPK: 7094720)

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

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7094713, 7094714, 7094715, 7094717, 7094724, 7094726

Sample #s: 7094713, 7094714, 7094715, 7094717, 7094724, 7094726

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.

REVISED

Sample Description: WS-003(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094713
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

3-SFC SDG#: PEI23-01

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

REVISED

Sample Description: WS-003(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094713
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

3-SFC SDG#: PEI23-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	21.2	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0220	0.00033	0.0050	1

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

REVISED

Sample Description: WS-003(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094713
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

3-SFC SDG#: PEI23-01

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.77	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	2.25	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 00:17	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 00:17	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 14:10	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:07	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 07:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-002(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094714
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:50 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

2-SFC SDG#: PEI23-02

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

REVISED

Sample Description: WS-002(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094714
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

2-SFC SDG#: PEI23-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO ₃	471-34-1	21.2	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0220	0.00033	0.0050	1

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

REVISED

Sample Description: WS-002(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094714
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 07:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

2-SFC SDG#: PEI23-02

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	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.94	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	2.15	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 00:39	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 00:39	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 14:40	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:11	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 07:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-005(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094715
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:20 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

5-SFC SDG#: PEI23-03

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

REVISED

Sample Description: WS-005(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094715
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

5-SFC SDG#: PEI23-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	21.2	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0180	0.00033	0.0050	1

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

REVISED

Sample Description: WS-005(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094715
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

5-SFC SDG#: PEI23-03

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	
07049	Cadmium	7440-43-9	0.00039 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.95	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	2.15	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0015 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 01:02	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 01:02	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 15:10	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:23	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 07:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-001(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094716
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

1-SFC SDG#: PEI23-04

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

REVISED

Sample Description: WS-001(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094716
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

1-SFC SDG#: PEI23-04

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	22.1	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	0.0346	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00041 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.10	0.0640	0.200	1

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

REVISED

Sample Description: WS-001(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094716
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

1-SFC SDG#: PEI23-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0021 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0058 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.27	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0028 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0027 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 01:24	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 01:24	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 15:40	Joseph M Gambler	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:27	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 07:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-001(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094717
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:00 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-1 SDG#: PEI23-05

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

REVISED

Sample Description: WS-001(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094717
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:00 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-1 SDG#: PEI23-05

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	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 recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	19.8	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0190	0.00033	0.0050	1

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

REVISED

Sample Description: WS-001(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094717
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-1 SDG#: PEI23-05

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	
07049	Cadmium	7440-43-9	0.00037 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.50	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	2.09	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

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	C131682AA	06/18/2013 01:46	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 01:46	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 16:09	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:31	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-004(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094718
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:10 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

4-SFC SDG#: PEI23-06

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

REVISED

Sample Description: WS-004(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094718
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

4-SFC SDG#: PEI23-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.5 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.012 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	34.4	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	0.0738	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00052 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	10.1	0.0640	0.200	1

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

REVISED

Sample Description: WS-004(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094718
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

4-SFC SDG#: PEI23-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0031 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0153	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.20	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0044 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0051	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 02:09	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 02:09	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 16:38	Joseph M Gambler	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:35	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-004(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094719
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-4 SDG#: PEI23-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	3.3 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

REVISED

Sample Description: WS-004(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094719
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-4 SDG#: PEI23-07

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	1.4	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.	0.010	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	0.012 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	21.2	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0481	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00044 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.91	0.0640	0.200	1

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

REVISED

Sample Description: WS-004(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094719
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-4 SDG#: PEI23-07

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	
07051	Chromium	7440-47-3	0.0049 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0201	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.16	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0046 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	0.0064	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 02:31	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 02:31	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 17:08	Joseph M Gambler	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:39	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-007(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094720
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

7-SFC SDG#: PEI23-08BKG

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	3.7 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

REVISED

Sample Description: WS-007(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094720
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

7-SFC SDG#: PEI23-08BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.5 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	0.013 J	0.010	0.050	1
08357	Acenaphthylene	208-96-8	0.015 J	0.010	0.050	1
08357	Anthracene	120-12-7	0.026 J	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.085	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.076	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	0.056	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.071	0.010	0.050	1
08357	Chrysene	218-01-9	0.22	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	0.021 J	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.30	0.010	0.050	1
08357	Fluorene	86-73-7	0.012 J	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.057	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.018 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.014 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	0.076	0.030	0.050	1
08357	Pyrene	129-00-0	0.26	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	18.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0582	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00039 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.19	0.0640	0.200	1

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

REVISED

Sample Description: WS-007(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094720
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

7-SFC SDG#: PEI23-08BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0024 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0057 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.99	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0027 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0047 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 02:53	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 02:53	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 12:13	Joseph M Gambler	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 20:43	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-007(Surface)061413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094721
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	42	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.8	0.1	0.5	1
02898	Benzene	71-43-2	5.7	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.4	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.9	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.7	0.1	0.5	1
02898	Bromoform	75-25-2	6.1	0.1	0.5	1
02898	Bromomethane	74-83-9	5.1	0.1	0.5	1
02898	2-Butanone	78-93-3	36	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.1	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.3	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.4	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.5	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.9	0.1	0.5	1
02898	Chloroethane	75-00-3	5.0	0.1	0.5	1
02898	Chloroform	67-66-3	5.8	0.1	0.5	1
02898	Chloromethane	74-87-3	4.5	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.4	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.6	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.0	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	6.1	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.6	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.7	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.4	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.5	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.4	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.4	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.5	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.5	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	6.3	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.8	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	6.2	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.3	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.7	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.4	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.8	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	6.1	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.1	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.2	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.6	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.6	0.1	0.5	1
02898	Freon 113	76-13-1	6.4	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.1	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.6	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.3	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.9	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	25	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.8	0.2	0.5	1

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

REVISED

Sample Description: WS-007(Surface)061413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094721
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.3	0.1	0.5	1
02898	Styrene	100-42-5	5.9	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	6.0	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.1	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	6.0	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	24	2.0	5.0	1
02898	Toluene	108-88-3	6.1	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.2	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.5	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.0	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.0	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.3	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.3	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.3	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.8	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.97	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	1.0	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.89	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.78	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.75	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.67	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.74	0.010	0.051	1
08357	Chrysene	218-01-9	0.81	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.67	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.70	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.0	0.010	0.051	1
08357	Naphthalene	91-20-3	1.0	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	1.1	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	38.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.156	0.0068	0.0200	1
07046	Barium	7440-39-3	2.06	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0507	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.65	0.0640	0.200	1

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

REVISED

Sample Description: WS-007(Surface)061413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094721
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.206	0.0011	0.0150	1
07055	Lead	7439-92-1	0.159	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.18	0.0606	0.100	1
07061	Nickel	7440-02-0	0.518	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.149	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0520	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.528	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0010	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 03:15	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 03:15	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 12:42	Joseph M Gambler	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 20:55	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertzt	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-007(Surface)061413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094722
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MSD

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	46	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.9	0.1	0.5	1
02898	Benzene	71-43-2	5.7	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.6	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.8	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.7	0.1	0.5	1
02898	Bromoform	75-25-2	6.1	0.1	0.5	1
02898	Bromomethane	74-83-9	5.2	0.1	0.5	1
02898	2-Butanone	78-93-3	39	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.6	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.5	0.1	0.5	1
02898	Chlorobenzene	108-90-7	6.0	0.1	0.5	1
02898	Chloroethane	75-00-3	5.0	0.1	0.5	1
02898	Chloroform	67-66-3	5.8	0.1	0.5	1
02898	Chloromethane	74-87-3	4.6	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.5	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.6	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.6	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	6.1	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.7	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.7	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.5	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.5	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.5	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.5	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.6	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	6.4	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.9	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	6.3	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.4	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.8	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.4	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.9	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	6.2	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.3	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.3	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.9	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.6	0.1	0.5	1
02898	Freon 113	76-13-1	6.4	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.1	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.7	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.4	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.0	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	25	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.9	0.2	0.5	1

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

REVISED

Sample Description: WS-007(Surface)061413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094722
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.4	0.1	0.5	1
02898	Styrene	100-42-5	5.9	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.9	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.2	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	6.1	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	26	2.0	5.0	1
02898	Toluene	108-88-3	6.6	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.3	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.5	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.1	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.1	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.5	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.5	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.4	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.5	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.0	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.011	0.053	1
08357	Acenaphthylene	208-96-8	1.1	0.011	0.053	1
08357	Anthracene	120-12-7	1.0	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.86	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.74	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.70	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.68	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.74	0.011	0.053	1
08357	Chrysene	218-01-9	0.83	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	0.71	0.011	0.053	1
08357	Fluoranthene	206-44-0	1.0	0.011	0.053	1
08357	Fluorene	86-73-7	1.0	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.011	0.053	1
08357	Naphthalene	91-20-3	1.0	0.032	0.053	1
08357	Phenanthrene	85-01-8	1.1	0.032	0.053	1
08357	Pyrene	129-00-0	1.0	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	36.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.05	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0502	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.01	0.0640	0.200	1

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

REVISED

Sample Description: WS-007(Surface)061413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094722
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

7-SFC SDG#: PEI23-08MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.203	0.0011	0.0150	1
07055	Lead	7439-92-1	0.157	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.97	0.0606	0.100	1
07061	Nickel	7440-02-0	0.516	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.149	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0524	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.524	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0010	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 03:37	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 03:37	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/21/2013 13:11	Joseph M Gambler	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 20:59	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-007(Surface)061413 DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094723
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:40 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

7-SFC SDG#: PEI23-08DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	18.5	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	0.0581	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00045 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.18	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0026 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0058 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.96	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0028 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0051	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 20:51	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-007(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094724
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:50 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-7 SDG#: PEI23-09

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	3.4 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

REVISED

Sample Description: WS-007(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094724
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:50 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-7 SDG#: PEI23-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	5.1	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	0.1 J	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	0.036 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.075	0.010	0.051	1
08357	Anthracene	120-12-7	0.12	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.40	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.41	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.61	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.32	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.41	0.010	0.051	1
08357	Chrysene	218-01-9	0.99	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.086	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.7	0.010	0.051	1
08357	Fluorene	86-73-7	0.051	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.33	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.022 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.020 J	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.34	0.030	0.051	1
08357	Pyrene	129-00-0	1.6	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	26.2	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.123	0.00033	0.0050	1

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

REVISED

Sample Description: WS-007(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094724
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 09:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-7 SDG#: PEI23-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	0.00077 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.10	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0124 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0356	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.28	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0105	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	0.0188	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 03:59	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 03:59	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/22/2013 09:10	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:43	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-006(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094725
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:20 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

6-SFC SDG#: PEI23-10

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

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

REVISED

Sample Description: WS-006(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094725
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

6-SFC SDG#: PEI23-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	19.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0189	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00041 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.47	0.0640	0.200	1

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

REVISED

Sample Description: WS-006(Surface)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094725
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

6-SFC SDG#: PEI23-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
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	2.07	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 04:21	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 04:21	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/22/2013 09:39	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:47	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-006(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094726
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:30 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-6 SDG#: PEI23-11

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

REVISED

Sample Description: WS-006(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094726
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/15/2013 09:30

PO Box 4416

Reported: 06/26/2013 13:32

Houston TX 77210-4416

510-6 SDG#: PEI23-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	19.8	0.064	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0201	0.00033	0.0050	1

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

REVISED

Sample Description: WS-006(0.5-1.0)061413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094726
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013 10:30 by TM

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

510-6 SDG#: PEI23-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.50	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	2.09	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131682AA	06/18/2013 04:44	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/18/2013 04:44	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13168WAD026	06/22/2013 10:09	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13168WAD026	06/17/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131716256001	06/20/2013 15:08	Parker D Lindstrom	1
07035	Arsenic	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07046	Barium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
01750	Calcium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07051	Chromium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07055	Lead	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07061	Nickel	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07036	Selenium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07066	Silver	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131661848003	06/19/2013 21:51	John P Hook	1
00259	Mercury	SW-846 7470A	1	131675713002	06/18/2013 08:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848003	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131675713002	06/17/2013 15:15	Nelli S Markaryan	1

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

REVISED

Sample Description: WS-TB-73-061413 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094727
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

73-TB SDG#: PEI23-12TB*

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

REVISED

Sample Description: WS-TB-73-061413 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7094727
LLI Group # 1397455
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/14/2013

ExxonMobil

Submitted: 06/15/2013 09:30

Mobil Pipeline Company

Reported: 06/26/2013 13:32

PO Box 4416

Houston TX 77210-4416

73-TB SDG#: PEI23-12TB*

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	C131682AA	06/17/2013 23:10	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131682AA	06/17/2013 23:10	Kevin A Sposito	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 06/26/13 at 01:32 PM

Group Number: 1397455

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: C131682AA	Sample number(s): 7094713-7094722, 7094724-7094727								
Acetone	N.D.	3.0	5.0	ug/l	114		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	88		61-130		
Benzene	N.D.	0.1	0.5	ug/l	104		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	112		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	107		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	121		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	99		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	97		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	114		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	110		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	96		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	107		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	86		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	103		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	106		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	117		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	116		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	109		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	83		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	102		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	108		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	111		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	110		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	122		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	107		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	101		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	104		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	107		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	100		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	100		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	113		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	96		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: 1397455

Reported: 06/26/13 at 01:32 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	103		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	99		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	95		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	95		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	109		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	99		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	112		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	109		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	109		65-131		
Toluene	N.D.	0.1	0.5	ug/l	105		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	80		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	86		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	107		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	109		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	101		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	104		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	92		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	106		80-120		

Batch number: 13168WAD026

Sample number(s): 7094713-7094722, 7094724-7094726

Acenaphthene	N.D.	0.010	0.050	ug/l	91		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	100		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	97		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	93		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	99		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	86		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	94		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	91		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	96		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	91		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	97		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	92		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	91		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	95		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	94		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	93		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	95		71-116		

Batch number: 131661848003

Sample number(s): 7094713-7094726

Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	99		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	101		90-112		
Calcium	0.0974 J	0.0640	0.200	mg/l	99		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	100		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	100		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	98		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	103		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	97		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	102		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	103		90-110		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1397455

Reported: 06/26/13 at 01:32 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: 131675713002	Sample number(s): 7094713-7094726								
Mercury	N.D.	0.00007	0.00020	mg/l	100		80-120		
		0							

Sample Matrix Quality Control

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

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: C131682AA	Sample number(s): 7094713-7094722, 7094724-7094727 UNSPK: 7094720								
Acetone	102	111	57-163	8	30				
Allyl Chloride	96	98	67-139	2	30				
Benzene	114	115	87-126	0	30				
Bromobenzene	108	111	80-123	3	30				
Bromochloromethane	118	117	82-125	1	30				
Bromodichloromethane	115	114	82-133	1	30				
Bromoform	121	122	60-138	1	30				
Bromomethane	102	104	41-145	2	30				
2-Butanone	95	104	63-146	9	30				
n-Butylbenzene	103	103	83-131	1	30				
sec-Butylbenzene	106	108	84-128	2	30				
tert-Butylbenzene	109	111	84-135	3	30				
Carbon Tetrachloride	129	129	81-148	0	30				
Chlorobenzene	119	119	78-133	0	30				
Chloroethane	99	100	70-139	0	30				
Chloroform	116	117	86-136	0	30				
Chloromethane	90	91	55-152	2	30				
2-Chlorotoluene	108	110	81-120	2	30				
4-Chlorotoluene	112	111	82-119	0	30				
1,2-Dibromo-3-chloropropane	101	111	43-143	10	30				
Dibromochloromethane	121	122	79-125	1	30				
1,2-Dibromoethane	111	113	84-127	2	30				
Dibromomethane	114	114	83-126	0	30				
1,2-Dichlorobenzene	109	111	83-117	1	30				
1,3-Dichlorobenzene	109	110	81-118	1	30				
1,4-Dichlorobenzene	109	110	79-120	1	30				
Dichlorodifluoromethane	88	90	28-136	2	30				
1,1-Dichloroethane	110	112	88-136	1	30				
1,2-Dichloroethane	111	114	82-135	3	30				
1,1-Dichloroethene	127	127	83-150	1	30				
cis-1,2-Dichloroethene	116	117	82-129	1	30				
trans-1,2-Dichloroethene	124	126	88-127	2	30				
Dichlorofluoromethane	126	129	59-176	2	30				
1,2-Dichloropropane	114	116	91-126	1	30				
1,3-Dichloropropane	107	108	80-127	1	30				
2,2-Dichloropropane	115	118	80-134	3	30				
1,1-Dichloropropene	121	123	86-139	2	30				
cis-1,3-Dichloropropene	101	106	74-132	4	30				
trans-1,3-Dichloropropene	104	107	71-128	2	30				
Ethyl ether	93	99	67-127	6	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: 06/26/13 at 01:32 PM

Group Number: 1397455

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	112	113	80-140	1	30				
Freon 113	127	128	87-158	1	30				
Hexachlorobutadiene	102	103	65-128	1	30				
Isopropylbenzene	112	114	81-133	1	30				
p-Isopropyltoluene	106	107	84-124	1	30				
Methyl Tertiary Butyl Ether	98	101	82-132	3	30				
4-Methyl-2-Pentanone	98	100	69-149	2	30				
Methylene Chloride	116	118	84-122	1	30				
n-Propylbenzene	106	107	79-131	1	30				
Styrene	117	118	63-151	0	30				
1,1,1,2-Tetrachloroethane	119	118	87-126	1	30				
1,1,2,2-Tetrachloroethane	102	104	75-131	2	30				
Tetrachloroethene	121	121	75-129	1	30				
Tetrahydrofuran	97	104	56-154	7	30				
Toluene	112	121	83-127	8	30				
1,2,3-Trichlorobenzene	84	85	73-125	1	30				
1,2,4-Trichlorobenzene	89	91	77-120	2	30				
1,1,1-Trichloroethane	119	123	85-140	3	30				
1,1,2-Trichloroethane	114	114	85-129	0	30				
Trichloroethene	120	121	85-131	1	30				
Trichlorofluoromethane	107	110	67-161	3	30				
1,2,3-Trichloropropane	106	110	76-120	4	30				
1,2,4-Trimethylbenzene	106	108	87-126	2	30				
1,3,5-Trimethylbenzene	108	110	89-129	2	30				
Vinyl Chloride	96	100	65-151	3	30				
Xylene (Total)	114	115	81-137	1	30				

Batch number: 13168WAD026 Sample number(s): 7094713-7094722,7094724-7094726 UNSPK: 7094720

Acenaphthene	94	94	59-127	3	30
Acenaphthylene	103	102	33-146	3	30
Anthracene	96	93	69-119	1	30
Benzo(a)anthracene	79	74	67-124	3	30
Benzo(a)pyrene	70	63*	64-123	6	30
Benzo(b)fluoranthene	63	57*	61-133	7	30
Benzo(g,h,i)perylene	61	59	36-138	1	30
Benzo(k)fluoranthene	66	63	59-128	1	30
Chrysene	58*	58*	62-118	3	30
Dibenz(a,h)anthracene	64	66	32-141	6	30
Fluoranthene	82	68	65-123	11	30
Fluorene	97	97	69-124	4	30
Indeno(1,2,3-cd)pyrene	64	62	29-143	1	30
1-Methylnaphthalene	103	103	67-117	4	30
2-Methylnaphthalene	100	100	71-126	4	30
Naphthalene	99	99	58-131	4	30
Phenanthrene	96	98	67-117	5	30
Pyrene	86	75	59-125	8	30

Batch number: 131661848003	Sample number(s): 7094713-7094726 UNSPK: 7094720 BKG: 7094720								
Arsenic	104	103	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	100	99	78-118	1	20	0.0582	0.0581	0	20
Cadmium	101	100	83-116	1	20	0.00039 J	0.00045 J	14 (1)	20
Calcium	112	96	81-118	8	20	4.19	4.18	0	20

*- Outside of specification

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

Quality Control SummaryClient Name: ExxonMobil
Reported: 06/26/13 at 01:32 PM

Group Number: 1397455

Sample Matrix Quality ControlUnspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Chromium	102	100	81-120	1	20	0.0024 J	0.0026 J	6 (1)	20
Lead	102	101	75-125	1	20	0.0057 J	0.0058 J	1 (1)	20
Magnesium	109	99	75-125	5	20	1.99	1.96	2	20
Nickel	103	103	86-115	0	20	0.0027 J	0.0028 J	5 (1)	20
Selenium	99	99	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	104	105	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	105	104	90-111	1	20	0.0047 J	0.0051	8 (1)	20

Batch number: 131675713002

Sample number(s): 7094713-7094726 UNSPK: 7094720 BKG: 7094720

Mercury 101 100 80-120 2 20 N.D. N.D. 0 (1) 20

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

Analysis Name: BTEX 25-ml purge

Batch number: C131682AA

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

7094713	109	106	98	94
7094714	110	104	98	93
7094715	109	106	98	94
7094716	110	105	97	94
7094717	111	106	98	94
7094718	110	106	97	93
7094719	110	105	97	93
7094720	109	104	97	93
7094721	107	105	100	100
7094722	106	105	101	100
7094724	109	105	96	94
7094725	109	104	98	94
7094726	110	107	97	94
7094727	108	104	97	93
Blank	108	106	98	93
LCS	106	105	101	101
MS	107	105	100	100
MSD	106	105	101	100

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

Analysis Name: PAHs in waters by SIM

Batch number: 13168WAD026

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

7094713	93	50*	100
7094714	84	52*	92
7094715	85	57*	93

*- 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: 06/26/13 at 01:32 PM

Group Number: 1397455

Surrogate Quality Control

7094716	87	63	95
7094717	87	59*	96
7094718	85	77	94
7094719	89	84	93
7094720	78	70	91
7094721	91	82	104
7094722	86	77	102
7094724	69	56*	80
7094725	92	63	97
7094726	85	48*	93
Blank	98	106	101
LCS	91	97	99
MS	91	82	104
MSD	86	77	102
Limits:	64-120	62-141	58-134

*- Outside of specification

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

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

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

ExxonMobil Analysis Request/Chain of Custody



**Lancaster
Laboratories**

Acct. # 14739 Group # 1397455 Sample # 7094713-27
For Eurofins Lancaster Laboratories use only
Instructions on reverse side correspond with circled numbers.

PS. 1 of 2

1 Client Information				4 Matrix		5 Analyses Requested										6 Remarks																																																																	
Facility #/SID <u>Mayflower Pipeline Incident</u>				☐ Sediment ☐ Ground ☒ Surface ☐ Potable ☐ NPDES ☐ Air ☐ Soil ☐ Water ☐ Oil		Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other																																																																	
Site Address <u>Mayflower, AR</u>						<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>H</td><td>N</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>												H	N																																																														
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ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE																																																																															
Consultant/Office <u>ARCADIS-US</u>																																																																																	
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-302-6799</u>														Data Analysis Questions: Lyndi Mott/ARCADIS																																																																	
Sampler <u>Tyler Milburn / Hens von Aller</u>																																																																																	
2 Sample Identification				3																																																																													
Collected		Grab		Composite																																																																													
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<u>WS-003 (Surface) 061413</u>		<u>6/14/13</u>		<u>0730</u>		☒		☒		☒		☒		☒		☒		☒		☒																																																													
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7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date		Time		Received by		Date		Time		9																																																																	
Standard <u>5 day</u> 4 day				<u>Lyndi Mott</u>		<u>6/14/13</u>		<u>1300</u>																																																																									
72 hour 48 hour 24 hour				Relinquished by		Date		Time																																																																									
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8 Data Package (circle if required)				EDD (circle if required)		Relinquished by Commercial Carrier		Received by		Date		Time		9																																																																			
Type I - Full				Locus EIM (default)		UPS FedEx ☒ Other				<u>6/15/13</u>		<u>0930</u>																																																																					
Type VI (Raw Data)				Other																																																																													
NJ Reduced																																																																																	
Other																																																																																	
Temperature Upon Receipt <u>1.2-1.4 °C</u>								Custody Seals Intact? <u>Yes</u> No																																																																									

G-1397455
Environmental Sample Administration
Receipt Documentation LogClient/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 6/15/13Custody Seal Present * : YES NOTime of Receipt: 0930

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

Source Code: 50Package: Chilled Not Chilled

Temperature of Shipping Containers

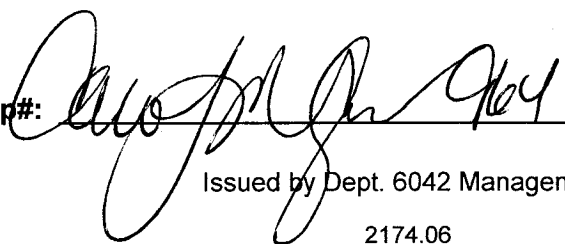
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.2	TB	WI	Y	B	SW
2		1.4					SW
3		0.6					SO
4		1.8					SO
5		1.0					OD
6							

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

Paperwork Discrepancy/Unpacking Problems:

Gr. 1397456 1 vial - 015D (1.5-2.0) labeled - 015D (1.0-1.5) labeled by firm
Gr. 1397456 1 vial - 016C (1.0-1.5) MS (moist vial) not ID'd det'd by process
of elimination.

Unpacker Signature/Emp#:

Date/Time: 6/15/13 1015

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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