eurofins | Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

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 25, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/19/2013
Group Number: 1398099
SDG: PEI32
PO Number: 4510076246
Release Number: MAYFLOWER 1406
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LLI) #
WS-003(Surface)061813 Grab Surface Water	7097737
WS-002(Surface)061813 Grab Surface Water	7097738
WS-005(Surface)061813 Grab Surface Water	7097739
WS-008(Surface)061813 Grab Surface Water	7097740
WS-008(Surface)061813MS Grab Surface Water	7097741
WS-008(Surface)061813MSD Grab Surface Water	7097742
WS-008(Surface)061813DUP Grab Surface Water	7097743
WS-001(Surface)061813 Grab Surface Water	7097744
WS-001(0.5-1.0)061813 Grab Surface Water	7097745
WS-004(Surface)061813 Grab Surface Water	7097746
WS-004(0.5-1.0)061813 Grab Surface Water	7097747
WS-007(Surface)061813 Grab Surface Water	7097748
WS-007(0.5-1.0)061813 Grab Surface Water	7097749
WS-006(Surface)061813 Grab Surface Water	7097750
WS-006(0.5-1.0)061813 Grab Surface Water	7097751
WS-TB-76-061813 Water	7097752

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	ARCADIS	Attn: Emily Leamer

COPY TO		
ELECTRONIC	ARCADIS	Attn: Rhiannon Parmalee
COPY TO		
ELECTRONIC	ARCADIS	Attn: Jamie Pritchard
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Julie Foster
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Carl Wideman
COPY TO		

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1398099

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:

SW-846 8260B 25mL purge, GC/MS Volatiles

Batch #: H131702AA (Sample number(s): 7097737-7097742, 7097744-7097752 UNSPK: 7097740)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Methylene Chloride, trans-1,2-Dichloroethene, 2-Butanone, Tetrahydrofuran, 1,2-Dibromo-3-chloropropane

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: Acetone, 2-Butanone, Tetrahydrofuran

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13171WAE026 (Sample number(s): 7097737-7097742, 7097744-7097751 UNSPK: 7097740)

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

SW-846 6010B, Metals

Batch #: 131701848002 (Sample number(s): 7097737-7097751 UNSPK: 7097740 BKG: 7097740)

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

Sample Description: WS-003(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097737
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18003 SDG#: PEI32-01

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-003(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097737
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18003 SDG#: PEI32-01

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	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	0.011 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.011 J	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.8	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	0.0297	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00043 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	5.12	0.0640	0.200	1

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

Sample Description: WS-003(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097737
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18003 SDG#: PEI32-01

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**	
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	2.43	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	0.0014 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131702AA	06/19/2013 19:03	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 19:03	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 14:11	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:23	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 07:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097738
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:45 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18002 SDG#: PEI32-02

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-002(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097738
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:45 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18002 SDG#: PEI32-02

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	20.7	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	0.0197	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.67	0.0640	0.200	1

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

Sample Description: WS-002(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097738
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 08:45 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18002 SDG#: PEI32-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**	**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.20	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	H131702AA	06/19/2013 19:24	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 19:24	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 14:41	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:27	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 07:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097739
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 09:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18005 SDG#: PEI32-03

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-005(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097739
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 09:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18005 SDG#: PEI32-03

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	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	24.8	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	0.0232	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.23	0.0640	0.200	1

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

Sample Description: WS-005(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097739
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 09:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18005 SDG#: PEI32-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.25	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0011 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

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	H131702AA	06/19/2013 19:44	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 19:44	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 15:10	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:07	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:39	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 07:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-008(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097740
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04BKG

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

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

Sample Description: WS-008(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097740
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.014 J	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.014 J	0.011	0.053	1
08357	Fluorene	86-73-7	0.013 J	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.088	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	70.7	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	0.0555	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00042 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	15.7	0.0640	0.200	1

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

Sample Description: WS-008(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097740
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04BKG

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	7.65	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0035 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	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	H131702AA	06/19/2013 20:05	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 20:05	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 12:42	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 21:59	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-008(Surface)061813MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097741
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	39	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.6	0.1	0.5	1
02898	Benzene	71-43-2	6.1	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.1	0.1	0.5	1
02898	Bromochloromethane	74-97-5	6.0	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.6	0.1	0.5	1
02898	Bromoform	75-25-2	4.9	0.1	0.5	1
02898	Bromomethane	74-83-9	6.0	0.1	0.5	1
02898	2-Butanone	78-93-3	41	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.2	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.4	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.8	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.4	0.1	0.5	1
02898	Chloroethane	75-00-3	6.2	0.1	0.5	1
02898	Chloroform	67-66-3	6.2	0.1	0.5	1
02898	Chloromethane	74-87-3	6.2	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.2	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.3	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.8	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.1	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.1	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.5	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.1	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.3	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.2	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.1	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	6.0	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	6.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	6.1	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	6.7	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	7.3	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.8	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.8	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.3	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	6.5	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.4	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.7	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	6.9	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.4	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	5.5	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	26	1.0	5.0	1
02898	Methylene Chloride	75-09-2	6.2	0.2	0.5	1

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

Sample Description: WS-008(Surface)061813MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097741
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	5.3	0.1	0.5	1
02898	Styrene	100-42-5	5.4	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.4	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.8	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.7	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.9	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.4	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.2	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.4	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.3	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.8	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.2	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.3	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	6.1	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	1.0	0.011	0.053	1
08357	Acenaphthylene	208-96-8	1.2	0.011	0.053	1
08357	Anthracene	120-12-7	0.92	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	1.1	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.96	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.96	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.65	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.51	0.011	0.053	1
08357	Chrysene	218-01-9	0.89	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	1.1	0.011	0.053	1
08357	Fluorene	86-73-7	1.1	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	1.2	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	1.2	0.011	0.053	1
08357	Naphthalene	91-20-3	1.2	0.032	0.053	1
08357	Phenanthrene	85-01-8	1.1	0.032	0.053	1
08357	Pyrene	129-00-0	1.1	0.011	0.053	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	89.7	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	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0500	0.00036	0.0050	1
01750	Calcium	7440-70-2	20.0	0.0640	0.200	1

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

Sample Description: WS-008(Surface)061813MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097741
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MS

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	0.205	0.0011	0.0150	1
07055	Lead	7439-92-1	0.151	0.0051	0.0150	1
01757	Magnesium	7439-95-4	9.67	0.0606	0.100	1
07061	Nickel	7440-02-0	0.511	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.150	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0529	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.532	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00091	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	H131702AA	06/19/2013 20:25	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 20:25	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 13:12	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:11	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-008(Surface)061813MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097742
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	55	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.5	0.1	0.5	1
02898	Benzene	71-43-2	5.9	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.0	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.8	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.6	0.1	0.5	1
02898	Bromoform	75-25-2	4.9	0.1	0.5	1
02898	Bromomethane	74-83-9	5.8	0.1	0.5	1
02898	2-Butanone	78-93-3	57	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.1	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.1	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.3	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.4	0.1	0.5	1
02898	Chloroethane	75-00-3	5.9	0.1	0.5	1
02898	Chloroform	67-66-3	6.1	0.1	0.5	1
02898	Chloromethane	74-87-3	6.1	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.1	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.0	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	7.6	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.0	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.2	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.5	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.1	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.2	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.1	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.9	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.9	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	6.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	6.0	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	6.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	7.1	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.7	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.9	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.2	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	6.3	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	4.6	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.4	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.3	0.1	0.5	1
02898	Freon 113	76-13-1	6.8	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.2	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.5	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.2	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.4	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	6.2	0.2	0.5	1

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

Sample Description: WS-008(Surface)061813MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097742
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	5.1	0.1	0.5	1
02898	Styrene	100-42-5	5.3	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.4	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.6	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	40	2.0	5.0	1
02898	Toluene	108-88-3	5.3	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.7	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.9	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	6.4	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.2	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.2	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.3	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.7	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.1	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.2	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	6.5	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	1.0	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	0.89	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.98	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.88	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.63	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.47	0.010	0.051	1
08357	Chrysene	218-01-9	0.80	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	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.71	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.3	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	86.6	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.159	0.0068	0.0200	1
07046	Barium	7440-39-3	2.07	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0497	0.00036	0.0050	1
01750	Calcium	7440-70-2	19.2	0.0640	0.200	1

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

Sample Description: WS-008(Surface)061813MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097742
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04MSD

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	0.202	0.0011	0.0150	1
07055	Lead	7439-92-1	0.151	0.0051	0.0150	1
01757	Magnesium	7439-95-4	9.38	0.0606	0.100	1
07061	Nickel	7440-02-0	0.509	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.149	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0531	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.525	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00090	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	H131702AA	06/19/2013 20:45	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 20:45	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 13:41	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:15	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:10	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-008(Surface)061813DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097743
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:30 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18008 SDG#: PEI32-04DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	70.8	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	0.0559	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	15.8	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0012 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.64	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0034 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0018 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:07	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-001(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097744
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18011 SDG#: PEI32-05

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-001(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097744
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18011 SDG#: PEI32-05

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.4	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	0.0254	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00037 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

Sample Description: WS-001(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097744
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 10:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18011 SDG#: PEI32-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.22	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	0.0016 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	H131702AA	06/19/2013 21:06	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 21:06	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 15:40	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:43	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097745
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18012 SDG#: PEI32-06

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-001(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097745
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18012 SDG#: PEI32-06

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.5	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	0.0293	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.87	0.0640	0.200	1

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

Sample Description: WS-001(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097745
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18012 SDG#: PEI32-06

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	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.27	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	0.0014 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131702AA	06/19/2013 21:26	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 21:26	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 16:09	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:11	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:47	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:14	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-004(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097746
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18041 SDG#: PEI32-07

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-004(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097746
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18041 SDG#: PEI32-07

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	0.015 J	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	16.3	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0218	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00052 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.76	0.0640	0.200	1

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

Sample Description: WS-004(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097746
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18041 SDG#: PEI32-07

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	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.67	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0018 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131702AA	06/19/2013 21:47	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 21:47	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 16:39	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:15	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:51	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-004(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097747
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18042 SDG#: PEI32-08

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

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

Sample Description: WS-004(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097747
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18042 SDG#: PEI32-08

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.5	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	0.051	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	0.016	J	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	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	0.0346		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00036	0.0050	1
01750	Calcium	7440-70-2	4.57		0.0640	0.200	1

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

Sample Description: WS-004(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097747
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:20 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18042 SDG#: PEI32-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	0.0012 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.73	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0024 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	0.0024 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	H131702AA	06/19/2013 22:07	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 22:07	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 19:30	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:19	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:55	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-007(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097748
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:40 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18071 SDG#: PEI32-09

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-007(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097748
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:40 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18071 SDG#: PEI32-09

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.017 J	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	0.027 J	0.010	0.052	1
08357	Fluorene	86-73-7	0.014 J	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	0.026 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.021 J	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	0.023 J	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	16.1	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0068 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0318	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00039 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.72	0.0640	0.200	1

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

Sample Description: WS-007(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097748
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:40 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18071 SDG#: PEI32-09

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**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.66	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0020 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0030 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

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	H131702AA	06/19/2013 22:28	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 22:28	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 20:00	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:22	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 22:59	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097749
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18072 SDG#: PEI32-10

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-007(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097749
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18072 SDG#: PEI32-10

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 purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.8		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	0.025	J	0.010	0.052	1
08357	Acenaphthylene	208-96-8	0.032	J	0.010	0.052	1
08357	Anthracene	120-12-7	0.058		0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.17		0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.16		0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.22		0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.10		0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.13		0.010	0.052	1
08357	Chrysene	218-01-9	0.43		0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.029	J	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.74		0.010	0.052	1
08357	Fluorene	86-73-7	0.023	J	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.10		0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.026	J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.021	J	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.		0.031	0.052	1
08357	Phenanthrene	85-01-8	0.19		0.031	0.052	1
08357	Pyrene	129-00-0	0.67		0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	16.6		0.064	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0392		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00036	0.0050	1
01750	Calcium	7440-70-2	3.80		0.0640	0.200	1

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

Sample Description: WS-007(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097749
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 11:50 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18072 SDG#: PEI32-10

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	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.72	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0023 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	0.0036 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	H131702AA	06/19/2013 22:48	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 22:48	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 20:29	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:26	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 23:03	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-006(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097750
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18061 SDG#: PEI32-11

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 purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097750
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18061 SDG#: PEI32-11

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.6	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0217	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.92	0.0640	0.200	1

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

Sample Description: WS-006(Surface)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097750
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:00 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18061 SDG#: PEI32-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**	**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.27	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	H131702AA	06/19/2013 23:09	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 23:09	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 20:59	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 23:07	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097751
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18062 SDG#: PEI32-12

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

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

Sample Description: WS-006(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097751
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18062 SDG#: PEI32-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.3	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0235	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.83	0.0640	0.200	1

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

eurofins | Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: WS-006(0.5-1.0)061813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097751
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013 12:10 by TM

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18062 SDG#: PEI32-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**	**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.24	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	H131702AA	06/19/2013 23:30	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 23:30	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13171WAE026	06/24/2013 21:28	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13171WAE026	06/20/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256012	06/21/2013 12:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	131701848002	06/22/2013 20:30	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	131701848002	06/20/2013 23:11	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	131705713003	06/21/2013 08:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131701848002	06/20/2013 10:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131705713003	06/20/2013 15:30	Nelli S Markaryan	1

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

Sample Description: WS-TB-76-061813 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097752
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18T76 SDG#: PEI32-13TB*

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

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

Sample Description: WS-TB-76-061813 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7097752
LLI Group # 1398099
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/18/2013

Submitted: 06/19/2013 09:05
Reported: 06/25/2013 18:33

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

18T76 SDG#: PEI32-13TB*

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

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	H131702AA	06/19/2013 18:02	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131702AA	06/19/2013 18:02	Sara E Johnson	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1398099
Reported: 06/25/13 at 06:33 PM

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

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: H131702AA	Sample number(s): 7097737-7097742,7097744-7097752								
Acetone	N.D.	3.0	5.0	ug/l	90		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	93		61-130		
Benzene	N.D.	0.1	0.5	ug/l	103		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	110		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	100		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	93		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	105		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	84		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	83		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	88		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	112		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	104		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	107		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	94		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	91		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	90		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	87		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	92		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	94		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	93		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	92		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	92		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	81		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	113		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	113		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	126		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	89		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	106		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	95		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	86		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	100		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	107		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	84		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: 1398099
Reported: 06/25/13 at 06:33 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	88		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	102		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	97		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	108		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	88		80-120		
Styrene	N.D.	0.1	0.5	ug/l	94		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	97		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	87		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	95		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	90		65-131		
Toluene	N.D.	0.1	0.5	ug/l	93		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	86		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	88		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	109		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	93		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	108		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	92		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	101		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	94		80-120		
Batch number: 13171WAE026	Sample number(s): 7097737-7097742,7097744-7097751								
Acenaphthene	N.D.	0.010	0.050	ug/l	93		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	101		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	94		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	92		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	91		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	94		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	94		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	85		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	97		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	94		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	87		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	103		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	100		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	97		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	95		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	96		71-116		
Batch number: 131701848002	Sample number(s): 7097737-7097751								
Arsenic	N.D.	0.0068	0.0200	mg/l	103		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	101		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	100		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	101		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	100		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	103		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	105		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	104		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: 1398099
Reported: 06/25/13 at 06:33 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131705713003	Sample number(s): 7097737-7097751								
Mercury	N.D.	0.00007 0	0.00020	mg/l	97		80-120		

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
Batch number: H131702AA	Sample number(s): 7097737-7097742,7097744-7097752 UNSPK: 7097740								
Acetone	89	134	57-163	36*	30				
Allyl Chloride	112	110	67-139	2	30				
Benzene	122	118	87-126	3	30				
Bromobenzene	102	99	80-123	3	30				
Bromochloromethane	121	116	82-125	4	30				
Bromodichloromethane	113	113	82-133	0	30				
Bromoform	98	98	60-138	1	30				
Bromomethane	121	116	41-145	4	30				
2-Butanone	109	153*	63-146	33*	30				
n-Butylbenzene	104	103	83-131	1	30				
sec-Butylbenzene	105	103	84-128	2	30				
tert-Butylbenzene	107	105	84-135	2	30				
Carbon Tetrachloride	136	134	81-148	2	30				
Chlorobenzene	108	107	78-133	1	30				
Chloroethane	124	118	70-139	5	30				
Chloroform	124	123	86-136	1	30				
Chloromethane	124	122	55-152	1	30				
2-Chlorotoluene	104	102	81-120	2	30				
4-Chlorotoluene	105	100	82-119	5	30				
1,2-Dibromo-3-chloropropane	116	153*	43-143	28	30				
Dibromochloromethane	102	100	79-125	2	30				
1,2-Dibromoethane	102	104	84-127	2	30				
Dibromomethane	111	110	83-126	0	30				
1,2-Dichlorobenzene	103	101	83-117	1	30				
1,3-Dichlorobenzene	105	103	81-118	2	30				
1,4-Dichlorobenzene	104	103	79-120	1	30				
Dichlorodifluoromethane	103	98	28-136	5	30				
1,1-Dichloroethane	120	117	88-136	2	30				
1,2-Dichloroethane	114	110	82-135	3	30				
1,1-Dichloroethene	137	136	83-150	1	30				
cis-1,2-Dichloroethene	122	120	82-129	2	30				
trans-1,2-Dichloroethene	134*	132*	88-127	2	30				
Dichlorofluoromethane	146	142	59-176	2	30				
1,2-Dichloropropane	117	114	91-126	3	30				
1,3-Dichloropropane	97	98	80-127	1	30				
2,2-Dichloropropane	125	125	80-134	1	30				
1,1-Dichloropropene	129	126	86-139	2	30				
cis-1,3-Dichloropropene	109	107	74-132	2	30				
trans-1,3-Dichloropropene	94	93	71-128	1	30				
Ethyl ether	105	108	67-127	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Group Number: 1398099
Reported: 06/25/13 at 06:33 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	107	107	80-140	1	30				
Freon 113	138	136	87-158	1	30				
Hexachlorobutadiene	108	105	65-128	4	30				
Isopropylbenzene	111	109	81-133	2	30				
p-Isopropyltoluene	105	103	84-124	2	30				
Methyl Tertiary Butyl Ether	109	109	82-132	0	30				
4-Methyl-2-Pentanone	102	101	69-149	1	30				
Methylene Chloride	125*	124*	84-122	1	30				
n-Propylbenzene	105	102	79-131	3	30				
Styrene	107	107	63-151	1	30				
1,1,1,2-Tetrachloroethane	108	108	87-126	0	30				
1,1,2,2-Tetrachloroethane	97	92	75-131	5	30				
Tetrachloroethene	116	113	75-129	3	30				
Tetrahydrofuran	110	159*	56-154	37*	30				
Toluene	109	107	83-127	2	30				
1,2,3-Trichlorobenzene	95	95	73-125	0	30				
1,2,4-Trichlorobenzene	98	98	77-120	0	30				
1,1,1-Trichloroethane	128	128	85-140	1	30				
1,1,2-Trichloroethane	104	105	85-129	1	30				
Trichloroethene	127	124	85-131	3	30				
Trichlorofluoromethane	126	126	67-161	1	30				
1,2,3-Trichloropropane	96	93	76-120	3	30				
1,2,4-Trimethylbenzene	104	102	87-126	2	30				
1,3,5-Trimethylbenzene	106	104	89-129	2	30				
Vinyl Chloride	121	130	65-151	7	30				
Xylene (Total)	109	108	81-137	1	30				
Batch number: 13171WAE026	Sample number(s): 7097737-7097742,7097744-7097751 UNSPK: 7097740								
Acenaphthene	98	99	59-127	3	30				
Acenaphthylene	112	111	33-146	5	30				
Anthracene	87	88	69-119	3	30				
Benzo(a)anthracene	101	100	67-124	6	30				
Benzo(a)pyrene	91	97	64-123	3	30				
Benzo(b)fluoranthene	91	87	61-133	9	30				
Benzo(g,h,i)perylene	62	62	36-138	3	30				
Benzo(k)fluoranthene	48*	46*	59-128	9	30				
Chrysene	84	79	62-118	11	30				
Dibenz(a,h)anthracene	67	66	32-141	6	30				
Fluoranthene	103	104	65-123	2	30				
Fluorene	102	108	69-124	1	30				
Indeno(1,2,3-cd)pyrene	70	70	29-143	4	30				
1-Methylnaphthalene	114	110	67-117	8	30				
2-Methylnaphthalene	114	110	71-126	8	30				
Naphthalene	109	116	58-131	2	30				
Phenanthrene	109	106	67-117	7	30				
Pyrene	103	105	59-125	2	30				
Batch number: 131701848002	Sample number(s): 7097737-7097751 UNSPK: 7097740 BKG: 7097740								
Arsenic	104	106	81-123	2	20	N.D.	N.D.	0 (1)	20
Barium	102	101	78-118	1	20	0.0555	0.0559	1	20
Cadmium	99	99	83-116	1	20	0.00042 J	N.D.	200* (1)	20
Calcium	107	87	81-118	4	20	15.7	15.8	0	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Group Number: 1398099
Reported: 06/25/13 at 06:33 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	102	101	81-120	1	20	N.D.	0.0012 J	200* (1)	20
Lead	100	101	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	101	87	75-125	3	20	7.65	7.64	0	20
Nickel	101	101	86-115	0	20	0.0035 J	0.0034 J	1 (1)	20
Selenium	100	99	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	106	106	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	106	105	90-111	1	20	N.D.	0.0018 J	200* (1)	20
Batch number: 131705713003	Sample number(s): 7097737-7097751 UNSPK: 7097740 BKG: 7097740								
Mercury	91	90	80-120	1	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge
Batch number: H131702AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7097737	107	100	93	99
7097738	107	101	93	99
7097739	107	104	94	98
7097740	107	103	93	98
7097741	105	98	95	100
7097742	105	98	95	101
7097744	107	102	93	98
7097745	106	102	93	98
7097746	106	102	93	98
7097747	107	105	93	99
7097748	108	103	94	99
7097749	106	101	93	98
7097750	106	103	93	97
7097751	109	101	95	98
7097752	107	106	95	100
Blank	106	104	94	99
LCS	104	102	95	100
MS	105	98	95	100
MSD	105	98	95	101
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13171WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7097737	97	69	103
7097738	92	76	98

*- 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: 1398099
Reported: 06/25/13 at 06:33 PM

Surrogate Quality Control

7097739	92	77	93
7097740	93	69	102
7097741	106	87	111
7097742	95	79	108
7097744	85	76	94
7097745	97	75	103
7097746	95	88	100
7097747	92	81	99
7097748	90	81	101
7097749	85	75	96
7097750	96	76	103
7097751	94	71	100
Blank	92	91	103
LCS	90	94	100
MS	106	87	111
MSD	95	79	108
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

eurofins | Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
Acct. # 14739 Group # 1398099 Sample # 7097737-52
Instructions on reverse side correspond with circled numbers.

Pg. 1 of 2

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushnoe
Cost Center/AFE:
Consultant/Office: ARCADIS-US
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Tyler Milburn / Hans Van Aller

4 Matrix: Soil ☐ Sediment ☐ Water ☑ Surface ☐ Ground ☐ Potable ☐ NPDES ☐ Oil ☐ Air

5 Analyses Requested — Preservation Code: H | N

SCR#:

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

6 Remarks
Data Analysis Questions: Lyndi Mott/ARCADIS

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals + Ni, U (Ca, Mg)
WS-003(surface)061813	6/18/13	0830	✓		6	✓	✓	✓
WS-002(surface)061813		0845	✓		6	✓	✓	✓
WS-005(surface)061813		0920	✓		6	✓	✓	✓
WS-008(surface)061813		1030	✓		6	✓	✓	✓
WS-008(surface)061813 MS/MSD		1030	✓		12	✓	✓	✓
WS-001(surface)061813		1050	✓		6	✓	✓	✓
WS-001(0.5-1.0)061813		1100	✓		6	✓	✓	✓
WS-004(surface)061813		1110	✓		6	✓	✓	✓
WS-004(0.5-1.0)061813		1120	✓		6	✓	✓	✓
WS-007(surface)061813		1140	✓		6	✓	✓	✓
WS-007(0.5-1.0)061813		1150	✓		6	✓	✓	✓
WS-006(surface)061813		1200	✓		6	✓	✓	✓

MS/MSD

7 Turnaround Time Requested (TAT) (please circle)
Standard (5 day) 4 day
72 hour 48 hour 24 hour

8 Data Package (circle if required)
Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)
Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
Tyler Mill	6/18/13	1300			
Relinquished by Commercial Carrier: UPS ___ FedEx ✓ Other ___			Deborah Neal	6/19/13	0905

Temperature Upon Receipt 0.3-1.1 °C

Custody Seals Intact? (Yes) No

9

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 14739 For Eurofins Lancaster Laboratories use only Group # 1398099 Sample # 709737-52

Instructions on reverse side correspond with circled numbers.

Pg. 2 of 2

1 Client Information

Facility #/SID: MayFlower Pipeline Incident

Site Address: MayFlower, AR

ExxonMobil PM: Scott Bushroe

Cost Center/AFE:

Consultant/Office: ARCADIS - US

Consultant PM: Steve Bonnick

Consultant Phone #: 919-302-6799

Sampler: Tyler Milburn / Has Van Aller

SCR#:

4 Matrix

Sediment ☐ Soil ☐ | Ground ☐ Potable ☐ Water ✓ | Surface ✓ NPDES ☐ | Air ☐ Oil ☐

5 Analyses Requested

Preservation Code

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals +Ni, Mo, Mg
WS-006(0.5-1.0)061813	6/18/13	1210	✓		6	✓	✓	✓
WS-TB-76-061813	6/18/13	—	✓		2	✓		

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; O = Other

6 Remarks

Data Analysis Questions: Lyndi Mott / ARCADIS

7 Turnaround Time Requested (TAT) (please circle)

Standard | (5 day) | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

Type I - Full

Type VI (Raw Data)

NJ Reduced

Other

EDD (circle if required)

Locus EIM (default)

Other

Relinquished by	Date	Time	Received by	Date	Time
Tyler Miller	6/18/13	1300			
Relinquished by Commercial Carrier: UPS ___ FedEx ✓ Other ___			Received by: Deborah Redl	6/19/13	0905

9

Temperature Upon Receipt 0.3-1.1 °C

Custody Seals Intact? (Yes) No

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1398099

Client/Project: XOM Mayflower

Date of Receipt: 6/19/13

Time of Receipt: 0905

Source Code: 50-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.1	TB	WI	Y	B	
2	↓	0.3	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: DaNeslund 208 **Date/Time:** 6/19/13 0915

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 limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ 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

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	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.