

ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

July 30, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/23/2013

Group Number: 1405869

SDG: PEJ32

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-014(1.5-2.0)072213 Grab Surface Water	7135228
WS-012(1.5-2.0)072213 Grab Surface Water	7135229
WS-010(1.5-2.0)072213 Grab Surface Water	7135230
WS-005(Surface)072213 Grab Surface Water	7135231
WS-011(1.5-2.0)072213 Grab Surface Water	7135232
WS-003(Surface)072213 Grab Surface Water	7135233
WS-018(Surface)072213 Grab Surface Water	7135234
WS-002(Surface)072213 Grab Surface Water	7135235
WS-007(0.5-1.0)072213 Grab Surface Water	7135236
WS-006(0.5-1.0)072213 Grab Surface Water	7135237
WS-006(0.5-1.0)072213MS Grab Surface Water	7135238
WS-006(0.5-1.0)072213MSD Grab Surface Water	7135239
WS-006(0.5-1.0)072213DUP Grab Surface Water	7135240
WS-001(0.5-1.0)072213 Grab Surface Water	7135241
WS-EB-8-072213 Grab Water	7135242
WS-TB-103-072213 Water	7135243

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

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

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

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1405869

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

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

Batch #: 13205WAA026 (Sample number(s): 7135228-7135235, 7135237-7135239, 7135241-7135242 UNSPK: 7135237)

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

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Anthracene, Pyrene, Benzo(a)pyrene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7135230, 7135231, 7135232, 7135233, 7135234, 7135239, 7135241, MSD
Batch #: 13208WAE026 (Sample number(s): 7135236)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 1-Methylnaphthalene, Acenaphthylene, Fluoranthene

Sample #s: 7135236

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted and the QC is compliant. However, sample surrogates were outside of QC limits in the re-extraction. All results are reported from the first trial. Similar detections were obtained in both trials, but the concentrations were lower in the re-extraction.
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

Sample #s: 7135230, 7135231, 7135232, 7135233, 7135234, 7135239, 7135241

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

SW-846 6010B, Metals

Batch #: 132041848002 (Sample number(s): 7135228-7135242 UNSPK: 7135237 BKG: 7135237)

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

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

Sample Description: WS-014(1.5-2.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135228
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 08:15 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22014 SDG#: PEJ32-01

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

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

Sample Description: **WS-014(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135228**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:15 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22014 SDG#: PEJ32-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	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	25.7	0.033	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	0.0391	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.83	0.0334	0.200	1

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

Sample Description: **WS-014(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135228**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:15 by LD ExxonMobil
 Mobil Pipeline Company
 Submitted: 07/23/2013 09:20 PO Box 4416
 Reported: 07/30/2013 13:57 Houston TX 77210-4416

22014 SDG#: PEJ32-01

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	0.0025 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.70	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 19:29	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 19:29	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 04:20	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:39	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 04:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-012(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135229**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:30 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22012 SDG#: PEJ32-02

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

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

Sample Description: **WS-012(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135229**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:30 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22012 SDG#: PEJ32-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	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	N.D.	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	25.4	0.033	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	0.0473	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.76	0.0334	0.200	1

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

Sample Description: **WS-012(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135229**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:30 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22012 SDG#: PEJ32-02

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	0.0024 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.68	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 19:50	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 19:50	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 04:49	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:42	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 04:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-010(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135230**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:50 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-10 SDG#: PEJ32-03

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

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

Sample Description: **WS-010(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135230**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 08:50 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-10 SDG#: PEJ32-03

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.1	0.033	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	0.0527	0.00033	0.0050	1

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

Sample Description: WS-010(1.5-2.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135230
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 08:50 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-10 SDG#: PEJ32-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.89	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0065 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.76	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0034 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 20:11	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 20:11	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 05:19	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:54	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 04:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135231
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 09:15 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-05 SDG#: PEJ32-04

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

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

Sample Description: **WS-005 (Surface) 072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135231**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 09:15 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-05 SDG#: PEJ32-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.018 J	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.0	0.033	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	0.0377	0.00033	0.0050	1

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

Sample Description: WS-005 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135231
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 09:15 by LD

ExxonMobil

Mobil Pipeline Company

Submitted: 07/23/2013 09:20

PO Box 4416

Reported: 07/30/2013 13:57

Houston TX 77210-4416

22-05 SDG#: PEJ32-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.03	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.66	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 20:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 20:32	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 05:48	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:58	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 04:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135232
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:10 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-11 SDG#: PEJ32-05

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

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

Sample Description: **WS-011(1.5-2.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135232**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 11:10 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-11 SDG#: PEJ32-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	26.3	0.033	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	0.0417	0.00033	0.0050	1

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

Sample Description: WS-011(1.5-2.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135232
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:10 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-11 SDG#: PEJ32-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.92	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0023 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.79	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 20:53	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 20:53	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 06:18	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-003 (Surface) 072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135233**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 11:25 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-03 SDG#: PEJ32-06

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

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

Sample Description: WS-003 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135233
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:25 by LD ExxonMobil
Submitted: 07/23/2013 09:20 Mobil Pipeline Company
Reported: 07/30/2013 13:57 PO Box 4416
Houston TX 77210-4416

22-03 SDG#: PEJ32-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	27.1	0.033	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	0.0530	0.00033	0.0050	1

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

Sample Description: WS-003 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135233
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:25 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-03 SDG#: PEJ32-06

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	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.06	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.90	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 21:14	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 21:14	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 06:47	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:06	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-018 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135234
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:35 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-18 SDG#: PEJ32-07

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

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

Sample Description: **WS-018 (Surface) 072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135234**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 11:35 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-18 SDG#: PEJ32-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.8	0.033	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	0.0365	0.00033	0.0050	1

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

Sample Description: WS-018 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135234
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:35 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-18 SDG#: PEJ32-07

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	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.00	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.88	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 21:34	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 21:34	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 07:17	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:10	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-002 (Surface) 072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135235**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 11:52 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-02 SDG#: PEJ32-08

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

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

Sample Description: WS-002 (Surface) 072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135235
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 11:52 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-02 SDG#: PEJ32-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	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	26.1	0.033	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	0.0295	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.91	0.0334	0.200	1

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

Sample Description: **WS-002 (Surface) 072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135235**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 11:52 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-02 SDG#: PEJ32-08

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	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.76	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 21:55	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 21:55	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 07:46	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:14	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135236
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:05 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-07 SDG#: PEJ32-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	7.1	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	1.2 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-007(0.5-1.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135236**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:05 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-07 SDG#: PEJ32-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.75	0.10	0.50	1
08357	Acenaphthylene	208-96-8	2.2	0.10	0.50	1
08357	Anthracene	120-12-7	2.4	0.10	0.50	1
08357	Benzo(a)anthracene	56-55-3	4.1	0.10	0.50	1
08357	Benzo(a)pyrene	50-32-8	4.2	0.10	0.50	1
08357	Benzo(b)fluoranthene	205-99-2	9.6	0.10	0.50	1
08357	Benzo(g,h,i)perylene	191-24-2	4.2	0.10	0.50	1
08357	Benzo(k)fluoranthene	207-08-9	6.2	0.10	0.50	1
08357	Chrysene	218-01-9	8.2	0.10	0.50	1
08357	Dibenz(a,h)anthracene	53-70-3	1.7	0.10	0.50	1
08357	Fluoranthene	206-44-0	11	0.10	0.50	1
08357	Fluorene	86-73-7	1.0	0.10	0.50	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	5.2	0.10	0.50	1
08357	1-Methylnaphthalene	90-12-0	0.27 J	0.10	0.50	1
08357	2-Methylnaphthalene	91-57-6	0.36 J	0.10	0.50	1
08357	Naphthalene	91-20-3	0.46 J	0.30	0.50	1
08357	Phenanthrene	85-01-8	2.7	0.30	0.50	1
08357	Pyrene	129-00-0	10	0.10	0.50	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
 The sample was re-extracted and the QC is compliant. However, sample surrogates were outside of QC limits in the re-extraction. All results are reported from the first trial. Similar detections were obtained in both trials, but the concentrations were lower in the re-extraction.

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

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

Sample Description: WS-007(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135236
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:05 by LD ExxonMobil
Submitted: 07/23/2013 09:20 Mobil Pipeline Company
Reported: 07/30/2013 13:57 PO Box 4416
Houston TX 77210-4416

22-07 SDG#: PEJ32-09

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	78.0	0.033	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0382	0.0068	0.0200	1
07046	Barium	7440-39-3	0.683	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0026 J	0.00076	0.0050	1
01750	Calcium	7440-70-2	12.7	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0734	0.0016	0.0150	1
07055	Lead	7439-92-1	0.174	0.0047	0.0150	1
01757	Magnesium	7439-95-4	11.2	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0681	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.110	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00016 J	0.000060	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	I132041AA	07/23/2013 22:17	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 22:17	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13208WAE026	07/29/2013 16:23	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13208WAE026	07/29/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:18	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:09	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135236
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:05 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-07 SDG#: PEJ32-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135237
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:20 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-06 SDG#: PEJ32-10BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	3.8 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.2 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135237
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:20 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-06 SDG#: PEJ32-10BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	0.014 J	0.011	0.054	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	28.1	0.033	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0120 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0840	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.05	0.0334	0.200	1

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

Sample Description: **WS-006(0.5-1.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135237**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:20 by LD ExxonMobil
 Mobil Pipeline Company
 Submitted: 07/23/2013 09:20 PO Box 4416
 Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-06 SDG#: PEJ32-10BKG

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	0.0056 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0067 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.15	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0038 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0095	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 22:37	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 22:37	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 08:45	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:15	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)072213MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135238
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:20 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-06 SDG#: PEJ32-10MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	35	3.0	5.0	1
02898	Allyl Chloride	107-05-1	3.9	0.1	0.5	1
02898	Benzene	71-43-2	5.1	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.3	0.1	0.5	1
02898	Bromochloromethane	74-97-5	4.8	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.7	0.1	0.5	1
02898	Bromoform	75-25-2	4.4	0.1	0.5	1
02898	Bromomethane	74-83-9	4.3	0.1	0.5	1
02898	2-Butanone	78-93-3	36	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	4.6	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	4.7	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	4.5	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	4.9	0.1	0.5	1
02898	Chlorobenzene	108-90-7	4.9	0.1	0.5	1
02898	Chloroethane	75-00-3	4.5	0.1	0.5	1
02898	Chloroform	67-66-3	4.9	0.1	0.5	1
02898	Chloromethane	74-87-3	4.6	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	4.5	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	4.6	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.8	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	4.5	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.8	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.8	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	4.6	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	4.6	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	4.6	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.1	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	4.8	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.0	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	4.8	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.0	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.3	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.1	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	4.3	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.1	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.4	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.3	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.1	0.1	0.5	1
02898	Ethylbenzene	100-41-4	4.8	0.1	0.5	1
02898	Freon 113	76-13-1	5.1	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	3.7	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	4.7	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	4.9	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.1	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	23	1.0	5.0	1
02898	Methylene Chloride	75-09-2	4.7	0.2	0.5	1

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

Sample Description: **WS-006 (0.5-1.0) 072213MS Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135238**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:20 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-06 SDG#: PEJ32-10MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
02898	n-Propylbenzene	103-65-1	4.7	0.1	0.5	1
02898	Styrene	100-42-5	4.6	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	4.7	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	4.5	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	24	2.0	5.0	1
02898	Toluene	108-88-3	4.9	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.1	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.0	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	4.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	4.8	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.1	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	4.7	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	4.6	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	4.5	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.8	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	14	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.95	0.011	0.054	1
08357	Acenaphthylene	208-96-8	1.1	0.011	0.054	1
08357	Anthracene	120-12-7	0.48	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	0.93	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	0.63	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	0.88	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	0.77	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	0.84	0.011	0.054	1
08357	Chrysene	218-01-9	0.85	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	0.80	0.011	0.054	1
08357	Fluoranthene	206-44-0	1.1	0.011	0.054	1
08357	Fluorene	86-73-7	1.0	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.98	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.011	0.054	1
08357	Naphthalene	91-20-3	1.0	0.032	0.054	1
08357	Phenanthrene	85-01-8	1.0	0.032	0.054	1
08357	Pyrene	129-00-0	1.2	0.011	0.054	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	47.8	0.033	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.170	0.0068	0.0200	1
07046	Barium	7440-39-3	2.13	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0505	0.00076	0.0050	1
01750	Calcium	7440-70-2	10.4	0.0334	0.200	1

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

Sample Description: **WS-006 (0.5-1.0) 072213MS Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135238**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:20 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-06 SDG#: PEJ32-10MS

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	0.213	0.0016	0.0150	1
07055	Lead	7439-92-1	0.156	0.0047	0.0150	1
01757	Magnesium	7439-95-4	5.27	0.0167	0.100	1
07061	Nickel	7440-02-0	0.523	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.153	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0465	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.536	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000060	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	I132041AA	07/23/2013 22:59	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 22:59	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 10:14	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:27	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-006 (0.5-1.0) 072213MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135239
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:20 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-06 SDG#: PEJ32-10MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	38	3.0	5.0	1
02898	Allyl Chloride	107-05-1	3.9	0.1	0.5	1
02898	Benzene	71-43-2	4.9	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.2	0.1	0.5	1
02898	Bromochloromethane	74-97-5	4.7	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.6	0.1	0.5	1
02898	Bromoform	75-25-2	4.2	0.1	0.5	1
02898	Bromomethane	74-83-9	4.2	0.1	0.5	1
02898	2-Butanone	78-93-3	40	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	4.5	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	4.6	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	4.4	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	4.8	0.1	0.5	1
02898	Chlorobenzene	108-90-7	4.7	0.1	0.5	1
02898	Chloroethane	75-00-3	4.4	0.1	0.5	1
02898	Chloroform	67-66-3	4.8	0.1	0.5	1
02898	Chloromethane	74-87-3	4.4	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	4.4	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	4.5	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.1	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	4.3	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.7	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.6	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	4.5	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	4.5	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	4.5	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	3.9	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	4.7	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.5	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	4.9	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	4.7	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.0	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.1	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.0	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.6	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	4.3	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.0	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.4	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.2	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.2	0.1	0.5	1
02898	Ethylbenzene	100-41-4	4.6	0.1	0.5	1
02898	Freon 113	76-13-1	5.0	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	3.7	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	4.6	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	4.1	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	22	1.0	5.0	1
02898	Methylene Chloride	75-09-2	4.7	0.2	0.5	1

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

Sample Description: **WS-006 (0.5-1.0) 072213MSD Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135239**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:20 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-06 SDG#: PEJ32-10MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	4.6	0.1	0.5	1
02898	Styrene	100-42-5	4.5	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	4.5	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	4.4	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	26	2.0	5.0	1
02898	Toluene	108-88-3	4.8	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.0	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.0	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	4.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	4.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.0	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	4.8	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.5	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	4.5	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	4.5	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.7	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	14	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.85	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.051	1
08357	Anthracene	120-12-7	0.22	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.78	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.40	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.81	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.67	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.74	0.010	0.051	1
08357	Chrysene	218-01-9	0.74	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.72	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.99	0.010	0.051	1
08357	Fluorene	86-73-7	0.91	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.89	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.97	0.010	0.051	1
08357	Naphthalene	91-20-3	0.92	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.94	0.030	0.051	1
08357	Pyrene	129-00-0	0.81	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	50.0	0.033	0.20	1
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.175	0.0068	0.0200	1
07046	Barium	7440-39-3	2.18	0.00033	0.0050	1

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

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Sample Description: **WS-006 (0.5-1.0) 072213MSD Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135239**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:20 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-06 SDG#: PEJ32-10MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	0.0500	0.00076	0.0050	1
01750	Calcium	7440-70-2	10.5	0.0334	0.200	1
07051	Chromium	7440-47-3	0.210	0.0016	0.0150	1
07055	Lead	7439-92-1	0.158	0.0047	0.0150	1
01757	Magnesium	7439-95-4	5.75	0.0167	0.100	1
07061	Nickel	7440-02-0	0.523	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.153	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0459	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.530	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000060	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	I132041AA	07/23/2013 23:20	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 23:20	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 10:43	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:31	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-006 (0.5-1.0) 072213DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135240
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:20 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-06 SDG#: PEJ32-10DUP

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	28.9	0.033	0.20	1
SW-846 6010B			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0097 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0857	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.26	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0056 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0078 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.22	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0052 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0088	0.0020	0.0050	1
SW-846 7470A			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 02:23	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135241
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:40 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22-01 SDG#: PEJ32-11

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

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

Sample Description: **WS-001(0.5-1.0)072213 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135241**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 12:40 by LD ExxonMobil
 Submitted: 07/23/2013 09:20 Mobil Pipeline Company
 Reported: 07/30/2013 13:57 PO Box 4416
 Houston TX 77210-4416

22-01 SDG#: PEJ32-11

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.1	0.033	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	0.0472	0.00033	0.0050	1

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

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Sample Description: WS-001(0.5-1.0)072213 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135241
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013 12:40 by LD ExxonMobil
Mobil Pipeline Company
Submitted: 07/23/2013 09:20 PO Box 4416
Reported: 07/30/2013 13:57 Houston TX 77210-4416

22-01 SDG#: PEJ32-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.90	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.77	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 23:41	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 23:41	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 09:15	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:21	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-EB-8-072213 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135242**
LL Group # **1405869**
Account # **14739**

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

Collected: 07/22/2013 13:05 by LD

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22EB8 SDG#: PEJ32-12EB

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

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

Sample Description: **WS-EB-8-072213 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135242**
LL Group # **1405869**
Account # **14739**

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

Collected: 07/22/2013 13:05 by LD

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

Submitted: 07/23/2013 09:20

Reported: 07/30/2013 13:57

22EB8 SDG#: PEJ32-12EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.056	1
08357	Anthracene	120-12-7	N.D.	0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.056	1
08357	Chrysene	218-01-9	N.D.	0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.056	1
08357	Fluorene	86-73-7	N.D.	0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.056	1
08357	Naphthalene	91-20-3	0.14	0.034	0.056	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.056	1
08357	Pyrene	129-00-0	N.D.	0.011	0.056	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	0.85	0.033	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	0.0013 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	0.231	0.0334	0.200	1

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

Sample Description: **WS-EB-8-072213 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135242**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013 13:05 by LD

ExxonMobil

Mobil Pipeline Company

Submitted: 07/23/2013 09:20

PO Box 4416

Reported: 07/30/2013 13:57

Houston TX 77210-4416

22EB8 SDG#: PEJ32-12EB

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.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	0.0658 J	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	I132041AA	07/23/2013 18:26	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 18:26	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13205WAA026	07/26/2013 09:44	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13205WAA026	07/24/2013 17:05	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132066256001	07/25/2013 08:03	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132041848002	07/25/2013 03:25	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132045713002	07/25/2013 05:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132041848002	07/23/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132045713002	07/24/2013 14:10	Nelli S Markaryan	1

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

Sample Description: **WS-TB-103-072213 Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7135243**
 LL Group # **1405869**
 Account # **14739**

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

Collected: 07/22/2013

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22103 SDG#: PEJ32-13TB*

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

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

Sample Description: WS-TB-103-072213 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7135243
LL Group # 1405869
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/22/2013

ExxonMobil

Submitted: 07/23/2013 09:20

Mobil Pipeline Company

Reported: 07/30/2013 13:57

PO Box 4416

Houston TX 77210-4416

22103 SDG#: PEJ32-13TB*

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	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132041AA	07/23/2013 18:47	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132041AA	07/23/2013 18:47	Sara E Johnson	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/30/13 at 01:57 PM

Group Number: 1405869

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

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: I132041AA	Sample number(s): 7135228-7135239, 7135241-7135243								
Acetone	N.D.	3.0	5.0	ug/l	77		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	78		61-130		
Benzene	N.D.	0.1	0.5	ug/l	94		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	85		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	93		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	91		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	92		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	80		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	88		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	88		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	91		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	82		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	93		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	83		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	87		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	97		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	96		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	91		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	91		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	89		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	91		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	70		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	88		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	90		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	92		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	90		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	95		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	96		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	94		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	82		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	95		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	91		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	91		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	85		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	91		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	82		61-125		

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/30/13 at 01:57 PM

Group Number: 1405869

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	91		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	87		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	82		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	88		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	90		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
Styrene	N.D.	0.1	0.5	ug/l	90		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	92		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	95		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	88		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	90		65-131		
Toluene	N.D.	0.1	0.5	ug/l	92		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	84		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	87		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	97		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	94		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	88		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	94		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	88		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	89		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	85		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	91		80-120		

Batch number: 13205WAA026

Sample number(s): 7135228-7135235, 7135237-7135239, 7135241-7135242

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

Batch number: 13208WAE026

Sample number(s): 7135236

Acenaphthene	N.D.	0.010	0.050	ug/l	113	114	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	118*	119*	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	114	117	70-117	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	109	108	75-115	1	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	110	112	72-120	2	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	110	110	74-130	0	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	108	108	63-121	0	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	110	112	74-118	2	30
Chrysene	N.D.	0.010	0.050	ug/l	108	109	75-112	1	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	107	103	66-122	3	30
Fluoranthene	N.D.	0.010	0.050	ug/l	114	117*	73-116	3	30

*- Outside of specification

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Quality Control Summary

Client Name: ExxonMobil

Group Number: 1405869

Reported: 07/30/13 at 01:57 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Fluorene	N.D.	0.010	0.050	ug/l	107	107	74-115	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	110	107	66-122	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	115*	117*	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	113	113	74-119	0	30
Naphthalene	N.D.	0.030	0.050	ug/l	105	108	67-118	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	105	107	72-109	2	30
Pyrene	N.D.	0.010	0.050	ug/l	106	107	71-116	1	30

Batch number: 132041848002

Sample number(s): 7135228-7135242

Arsenic	N.D.	0.0068	0.0200	mg/l	111		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	101		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	101		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	100		88-110		
Magnesium	0.0342 J	0.0167	0.100	mg/l	100		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	91		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	103		90-110		

Batch number: 132045713002

Sample number(s): 7135228-7135242

Mercury	N.D.	0.00006	0.00020	mg/l	109		80-120		
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Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: I132041AA	Sample number(s): 7135228-7135239, 7135241-7135243 UNSPK: 7135237								
Acetone	82	91	57-163	9	30				
Allyl Chloride	79	78	67-139	0	30				
Benzene	101	98	87-126	3	30				
Bromobenzene	86	84	80-123	3	30				
Bromochloromethane	96	93	82-125	2	30				
Bromodichloromethane	94	91	82-133	3	30				
Bromoform	87	83	60-138	4	30				
Bromomethane	85	83	41-145	2	30				
2-Butanone	96	106	63-146	10	30				
n-Butylbenzene	93	91	83-131	2	30				
sec-Butylbenzene	93	91	84-128	3	30				
tert-Butylbenzene	90	89	84-135	2	30				
Carbon Tetrachloride	98	96	81-148	2	30				
Chlorobenzene	99	95	78-133	4	30				
Chloroethane	90	88	70-139	1	30				
Chloroform	99	96	86-136	3	30				
Chloromethane	91	88	55-152	3	30				
2-Chlorotoluene	91	89	81-120	2	30				
4-Chlorotoluene	93	90	82-119	3	30				
1,2-Dibromo-3-chloropropane	97	103	43-143	6	30				

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/30/13 at 01:57 PM

Group Number: 1405869

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Dibromochloromethane	90	87	79-125	4	30				
1,2-Dibromoethane	96	94	84-127	2	30				
Dibromomethane	95	92	83-126	3	30				
1,2-Dichlorobenzene	92	90	83-117	3	30				
1,3-Dichlorobenzene	91	90	81-118	2	30				
1,4-Dichlorobenzene	92	90	79-120	3	30				
Dichlorodifluoromethane	82	78	28-136	5	30				
1,1-Dichloroethane	95	94	88-136	2	30				
1,2-Dichloroethane	94	91	82-135	4	30				
1,1-Dichloroethene	100	99	83-150	1	30				
cis-1,2-Dichloroethene	96	94	82-129	2	30				
trans-1,2-Dichloroethene	101	101	88-127	0	30				
Dichlorofluoromethane	106	103	59-176	3	30				
1,2-Dichloropropane	103	100	91-126	3	30				
1,3-Dichloropropane	95	91	80-127	4	30				
2,2-Dichloropropane	86	85	80-134	1	30				
1,1-Dichloropropene	102	100	86-139	2	30				
cis-1,3-Dichloropropene	89	88	74-132	1	30				
trans-1,3-Dichloropropene	87	84	71-128	3	30				
Ethyl ether	82	84	67-127	2	30				
Ethylbenzene	95	92	80-140	3	30				
Freon 113	101	100	87-158	1	30				
Hexachlorobutadiene	75	74	65-128	1	30				
Isopropylbenzene	95	92	81-133	3	30				
p-Isopropyltoluene	94	100	84-124	7	30				
Methyl Tertiary Butyl Ether	82	83	82-132	1	30				
4-Methyl-2-Pentanone	93	89	69-149	4	30				
Methylene Chloride	94	94	84-122	1	30				
n-Propylbenzene	95	93	79-131	2	30				
Styrene	93	89	63-151	4	30				
1,1,1,2-Tetrachloroethane	93	90	87-126	4	30				
1,1,2,2-Tetrachloroethane	96	93	75-131	3	30				
Tetrachloroethene	91	88	75-129	2	30				
Tetrahydrofuran	95	103	56-154	9	30				
Toluene	99	96	83-127	3	30				
1,2,3-Trichlorobenzene	81	80	73-125	1	30				
1,2,4-Trichlorobenzene	81	80	77-120	1	30				
1,1,1-Trichloroethane	93	92	85-140	1	30				
1,1,2-Trichloroethane	97	94	85-129	2	30				
Trichloroethene	102	100	85-131	2	30				
Trichlorofluoromethane	94	96	67-161	2	30				
1,2,3-Trichloropropane	96	90	76-120	6	30				
1,2,4-Trimethylbenzene	91	89	87-126	2	30				
1,3,5-Trimethylbenzene	91	89	89-129	2	30				
Vinyl Chloride	95	93	65-151	2	30				
Xylene (Total)	95	91	81-137	4	30				

Batch number: 13205WAA026	Sample number(s): 7135228-7135235,7135237-7135239,7135241-7135242 UNSPK: 7135237								
Acenaphthene	88	83	59-127	12	30				
Acenaphthylene	100	98	33-146	8	30				
Anthracene	45*	22*	69-119	73*	30				
Benzo(a)anthracene	86	77	67-124	18	30				

*- Outside of specification

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Quality Control Summary

Client Name: ExxonMobil
Reported: 07/30/13 at 01:57 PM

Group Number: 1405869

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	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(a)pyrene	58*	39*	64-123	45*	30				
Benzo(b)fluoranthene	81	80	61-133	8	30				
Benzo(g,h,i)perylene	71	66	36-138	14	30				
Benzo(k)fluoranthene	77	72	59-128	13	30				
Chrysene	79	73	62-118	14	30				
Dibenz(a,h)anthracene	73	71	32-141	10	30				
Fluoranthene	99	97	65-123	8	30				
Fluorene	93	90	69-124	10	30				
Indeno(1,2,3-cd)pyrene	91	88	29-143	10	30				
1-Methylnaphthalene	102	99	67-117	10	30				
2-Methylnaphthalene	98	96	71-126	9	30				
Naphthalene	93	91	58-131	9	30				
Phenanthrene	95	92	67-117	10	30				
Pyrene	111	79	59-125	40*	30				

Batch number: 132041848002	Sample number(s): 7135228-7135242	UNSPK: 7135237	BKG: 7135237						
Arsenic	105	109	81-123	3	20	0.0120 J	0.0097 J	22* (1)	20
Barium	102	105	78-118	2	20	0.0840	0.0857	2	20
Cadmium	101	100	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	110	112	81-118	1	20	6.05	6.26	4	20
Chromium	104	102	81-120	1	20	0.0056 J	0.0056 J	0 (1)	20
Lead	100	101	75-125	1	20	0.0067 J	0.0078 J	16 (1)	20
Magnesium	106	130*	75-125	9	20	3.15	3.22	2	20
Nickel	104	104	86-115	0	20	0.0038 J	0.0052 J	29* (1)	20
Selenium	102	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	93	92	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	105	104	90-111	1	20	0.0095	0.0088	7 (1)	20

Batch number: 132045713002	Sample number(s): 7135228-7135242	UNSPK: 7135237	BKG: 7135237						
Mercury	109	109	80-120	0	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: I132041AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7135228	100	109	97	95
7135229	100	107	97	95
7135230	101	105	97	94
7135231	101	109	97	94
7135232	102	107	97	93
7135233	101	106	98	93
7135234	102	110	97	93
7135235	102	108	97	93
7135236	102	108	97	93

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/30/13 at 01:57 PM

Group Number: 1405869

Surrogate Quality Control

7135237	102	107	97	93
7135238	99	107	99	102
7135239	99	104	98	100
7135241	101	110	97	95
7135242	98	107	97	94
7135243	99	104	97	93
Blank	98	102	97	94
LCS	98	102	98	101
MS	99	107	99	102
MSD	99	104	98	100

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

Analysis Name: PAHs in waters by SIM

Batch number: 13205WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
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7135228	90	66	95
7135229	92	65	99
7135230	86	45*	90
7135231	70	22*	84
7135232	89	57*	95
7135233	89	50*	95
7135234	90	57*	97
7135235	91	65	96
7135237	95	63	100
7135238	90	73	96
7135239	88	58*	93
7135241	86	60*	92
7135242	96	98	99
Blank	99	98	102
LCS	100	103	100
MS	90	73	96
MSD	88	58*	93

Limits: 64-120 62-141 58-134

Analysis Name: PAHs in waters by SIM

Batch number: 13208WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
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7135236	78	65	102
Blank	112	125	120
LCS	104	110	110
LCSD	106	112	113

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.

Environmental Sample Administration
Receipt Documentation Log

1405869

Client/Project: Exxon mobil

Shipping Container Sealed: YES NO

Date of Receipt: 7.23.13

Custody Seal Present * : YES NO

Time of Receipt: 920

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

Source Code: 50-1

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DH46	0.7	TB	WI	Y	B	
2	↓	2.6	↓	↓	↓	↓	
3	/						
4	/						
5	/						
6	/						

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Branely Barclay 2299 Date/Time: 7.23.13 946

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m³	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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 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.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

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 \geq 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.

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