

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 24, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/17/2013
Group Number: 1404594
SDG: PEJ15
PO Number: 4510076246
Release Number: MAYFLOWER 1406
State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-003(Surface)071613 Grab Surface Water	7129339
WS-018(1.5-2.0)071613 Grab Surface Water	7129340
WS-011(1.5-2.0)071613 Grab Surface Water	7129341
WS-014(1.5-2.0)071613 Grab Surface Water	7129342
WS-012(1.5-2.0)071613 Grab Surface Water	7129343
WS-010(1.5-2.0)071613 Grab Surface Water	7129344
WS-005(Surface)071613 Grab Surface Water	7129345
WS-002(Surface)071613 Grab Surface Water	7129346
WS-001(0.5-1.0)071613 Grab Surface Water	7129347
WS-007(0.5-1.0)071613 Grab Surface Water	7129348
WS-006(0.5-1.0)071613 Grab Surface Water	7129349
WS-006(0.5-1.0)071613MS Grab Surface Water	7129350
WS-006(0.5-1.0)071613MSD Grab Surface Water	7129351
WS-006(0.5-1.0)071613DUP Grab Surface Water	7129352
WS-EB-02-071613 Grab Surface Water	7129353
WS-TB-98-071613 Water	7129354

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

COPY TO		
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
COPY TO		
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 #: 1404594

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 #: 13199WAA026 (Sample number(s): 7129339-7129351, 7129353 UNSPK: 7129349)

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

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7129341, 7129349

Sample #s: 7129341, 7129349

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

Sample Description: WS-003 (Surface) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129339
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 07:45 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16003 SDG#: PEJ15-01

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-003 (Surface) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129339
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 07:45 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16003 SDG#: PEJ15-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.049 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	26.9	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	0.0336	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.02	0.0334	0.200	1

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

Sample Description: **WS-003 (Surface) 071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129339**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 07:45 by AP ExxonMobil
 Submitted: 07/17/2013 09:20 Mobil Pipeline Company
 Reported: 07/24/2013 08:28 PO Box 4416
 Houston TX 77210-4416

16003 SDG#: PEJ15-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	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	I131981AA	07/17/2013 21:37	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 21:37	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 09:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-018(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129340
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 07:20 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16018 SDG#: PEJ15-02

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-018(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129340**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 07:20 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16018 SDG#: PEJ15-02

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	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.071	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	30.3	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	0.0796	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.73	0.0334	0.200	1

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

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Sample Description: **WS-018(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129340**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 07:20 by AP ExxonMobil
 Mobil Pipeline Company
 Submitted: 07/17/2013 09:20 PO Box 4416
 Reported: 07/24/2013 08:28 Houston TX 77210-4416

16018 SDG#: PEJ15-02

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	0.0021 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0076 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.28	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0030 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	0.0036 J	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	I131981AA	07/17/2013 21:58	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 21:58	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 09:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:07	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-011(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129341**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 08:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16011 SDG#: PEJ15-03

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-011(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129341**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 08:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16011 SDG#: PEJ15-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.041 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	26.7	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	0.0324	0.00033	0.0050	1

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

Sample Description: WS-011(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129341
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 08:10 by AP ExxonMobil
Mobil Pipeline Company
Submitted: 07/17/2013 09:20 PO Box 4416
Reported: 07/24/2013 08:28 Houston TX 77210-4416

16011 SDG#: PEJ15-03

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	5.99	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	2.86	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	I131981AA	07/17/2013 22:19	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 22:19	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 10:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:19	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129342
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 09:45 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16014 SDG#: PEJ15-04

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

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

Sample Description: **WS-014(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129342**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 09:45 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16014 SDG#: PEJ15-04

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	0.044 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
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	0.0419	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.93	0.0334	0.200	1

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

Sample Description: **WS-014(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129342**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 09:45 by AP ExxonMobil
 Submitted: 07/17/2013 09:20 Mobil Pipeline Company
 Reported: 07/24/2013 08:28 PO Box 4416
 Houston TX 77210-4416

16014 SDG#: PEJ15-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.74	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	I131981AA	07/17/2013 22:40	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 22:40	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 10:33	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:23	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129343
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 10:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16012 SDG#: PEJ15-05

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

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

Sample Description: WS-012(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129343
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 10:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16012 SDG#: PEJ15-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.033 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
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	0.0280	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.94	0.0334	0.200	1

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

Sample Description: WS-012(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129343
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 10:10 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16012 SDG#: PEJ15-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.75	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	I131981AA	07/17/2013 23:01	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 23:01	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 11:00	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:26	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-010(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129344**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 10:35 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16010 SDG#: PEJ15-06

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-010(1.5-2.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129344**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 10:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16010 SDG#: PEJ15-06

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	0.039 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	25.6	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	0.0289	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.80	0.0334	0.200	1

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

Sample Description: WS-010(1.5-2.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129344
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 10:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16010 SDG#: PEJ15-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	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	I131981AA	07/17/2013 23:22	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 23:22	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 11:27	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:30	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-005 (Surface) 071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129345**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 12:35 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16005 SDG#: PEJ15-07

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

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

Sample Description: WS-005 (Surface) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129345
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 12:35 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16005 SDG#: PEJ15-07

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.039 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	26.9	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	0.0250	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.33	0.0334	0.200	1

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

Sample Description: WS-005 (Surface) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129345
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 12:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16005 SDG#: PEJ15-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	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	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	I131981AA	07/17/2013 23:43	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 23:43	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 11:54	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:34	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-002 (Surface) 071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129346**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 12:05 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16002 SDG#: PEJ15-08

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) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129346
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 12:05 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16002 SDG#: PEJ15-08

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.047 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
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	0.0305	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-002 (Surface) 071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129346
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 12:05 by AP ExxonMobil
Mobil Pipeline Company
Submitted: 07/17/2013 09:20 PO Box 4416
Reported: 07/24/2013 08:28 Houston TX 77210-4416

16002 SDG#: PEJ15-08

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	2.83	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	I131981AA	07/18/2013 00:03	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/18/2013 00:03	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 12:21	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129347
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 13:45 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16001 SDG#: PEJ15-09

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

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

Sample Description: WS-001(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129347
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 13:45 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16001 SDG#: PEJ15-09

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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.033 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
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	0.0255	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.75	0.0334	0.200	1

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

Sample Description: WS-001(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129347
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 13:45 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16001 SDG#: PEJ15-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	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	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	I131981AA	07/18/2013 00:24	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/18/2013 00:24	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 12:49	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:42	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129348
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:00 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16007 SDG#: PEJ15-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	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	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)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129348**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 14:00 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16007 SDG#: PEJ15-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.011 J	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.023 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	0.018 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.039 J	0.010	0.052	1
08357	Fluorene	86-73-7	0.014 J	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.013 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.011 J	0.010	0.052	1
08357	Naphthalene	91-20-3	0.044 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	0.037 J	0.031	0.052	1
08357	Pyrene	129-00-0	0.029 J	0.010	0.052	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	19.7	0.033	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0069 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0692	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	4.26	0.0334	0.200	1

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

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Sample Description: WS-007(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129348
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:00 by AP ExxonMobil
Mobil Pipeline Company
Submitted: 07/17/2013 09:20 PO Box 4416
Reported: 07/24/2013 08:28 Houston TX 77210-4416

16007 SDG#: PEJ15-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0041 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0094 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.20	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0046 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	0.0101	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	I131981AA	07/18/2013 00:45	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/18/2013 00:45	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 13:16	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:45	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129349
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16006 SDG#: PEJ15-11BKG

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

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

Sample Description: **WS-006(0.5-1.0)071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129349**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16006 SDG#: PEJ15-11BKG

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as 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	0.0331	0.00033	0.0050	1

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

Sample Description: WS-006(0.5-1.0)071613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129349
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16006 SDG#: PEJ15-11BKG

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	2.76	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	I131981AA	07/17/2013 18:50	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 18:50	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 07:50	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 17:41	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 04:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-006(0.5-1.0)071613MS Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129350**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16006 SDG#: PEJ15-11MS

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	36	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.2	0.1	0.5	1
02898	Benzene	71-43-2	5.3	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.7	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.0	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.7	0.1	0.5	1
02898	Bromoform	75-25-2	4.2	0.1	0.5	1
02898	Bromomethane	74-83-9	4.4	0.1	0.5	1
02898	2-Butanone	78-93-3	40	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.2	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.3	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.2	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.3	0.1	0.5	1
02898	Chloroethane	75-00-3	4.6	0.1	0.5	1
02898	Chloroform	67-66-3	5.2	0.1	0.5	1
02898	Chloromethane	74-87-3	4.1	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.1	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.1	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.5	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	4.6	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.9	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.8	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.1	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.1	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.1	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	2.8	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.0	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.9	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.3	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.1	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.4	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.9	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.2	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	4.6	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.5	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.5	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.9	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.2	0.1	0.5	1
02898	Freon 113	76-13-1	5.4	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	4.6	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.3	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.1	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.2	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	21	1.0	5.0	1
02898	Methylene Chloride	75-09-2	4.9	0.2	0.5	1

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

Sample Description: **WS-006(0.5-1.0)071613MS Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129350**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16006 SDG#: PEJ15-11MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.2	0.1	0.5	1
02898	Styrene	100-42-5	5.1	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	4.9	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.8	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.2	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.5	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.6	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.0	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.0	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.4	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	4.7	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.0	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.1	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.5	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.89	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.052	1
08357	Anthracene	120-12-7	0.22	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.75	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.40	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.87	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.69	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.82	0.010	0.052	1
08357	Chrysene	218-01-9	0.84	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.75	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.0	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.74	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.96	0.010	0.052	1
08357	Naphthalene	91-20-3	1.1	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	0.75	0.010	0.052	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	43.2	0.033	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.157	0.0068	0.0200	1
07046	Barium	7440-39-3	2.14	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0514	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.62	0.0334	0.200	1

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

Sample Description: WS-006 (0.5-1.0) 071613MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129350
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP ExxonMobil
Mobil Pipeline Company
Submitted: 07/17/2013 09:20 PO Box 4416
Reported: 07/24/2013 08:28 Houston TX 77210-4416

16006 SDG#: PEJ15-11MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.206	0.0016	0.0150	1
07055	Lead	7439-92-1	0.161	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.65	0.0167	0.100	1
07061	Nickel	7440-02-0	0.532	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.155	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0502	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.527	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0010	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	I131981AA	07/17/2013 19:11	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 19:11	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 08:17	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 17:52	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 05:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-006 (0.5-1.0) 071613MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129351
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16006 SDG#: PEJ15-11MSD

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	4.4	0.1	0.5	1
02898	Benzene	71-43-2	5.4	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.8	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.2	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.8	0.1	0.5	1
02898	Bromoform	75-25-2	4.3	0.1	0.5	1
02898	Bromomethane	74-83-9	4.4	0.1	0.5	1
02898	2-Butanone	78-93-3	39	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.3	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.2	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.3	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.4	0.1	0.5	1
02898	Chloroethane	75-00-3	4.5	0.1	0.5	1
02898	Chloroform	67-66-3	5.4	0.1	0.5	1
02898	Chloromethane	74-87-3	4.0	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.2	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.2	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	4.7	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.8	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.2	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.2	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.2	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	2.7	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.1	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.9	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.6	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.3	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.8	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.4	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.9	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	4.8	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.6	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.8	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.7	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.3	0.1	0.5	1
02898	Freon 113	76-13-1	5.6	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	4.5	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.3	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.3	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.6	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	5.2	0.2	0.5	1

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

Sample Description: WS-006 (0.5-1.0) 071613MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129351
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16006 SDG#: PEJ15-11MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.3	0.1	0.5	1
02898	Styrene	100-42-5	5.1	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.0	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.9	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.2	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	26	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.6	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.7	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.1	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.1	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.5	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	4.9	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.0	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.2	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.2	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.4	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.89	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.052	1
08357	Anthracene	120-12-7	0.24	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.78	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.45	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.93	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.79	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.89	0.010	0.052	1
08357	Chrysene	218-01-9	0.89	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.87	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.052	1
08357	Fluorene	86-73-7	1.0	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.84	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.96	0.010	0.052	1
08357	Naphthalene	91-20-3	1.1	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.052	1
08357	Pyrene	129-00-0	0.74	0.010	0.052	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	44.4	0.033	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.14	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0517	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.92	0.0334	0.200	1

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

Sample Description: WS-006 (0.5-1.0) 071613MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129351
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP ExxonMobil
Mobil Pipeline Company
Submitted: 07/17/2013 09:20 PO Box 4416
Reported: 07/24/2013 08:28 Houston TX 77210-4416

16006 SDG#: PEJ15-11MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.161	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.77	0.0167	0.100	1
07061	Nickel	7440-02-0	0.533	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.154	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0504	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.525	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	I131981AA	07/17/2013 19:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 19:32	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 08:44	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 17:56	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 05:06	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

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Sample Description: WS-006 (0.5-1.0) 071613DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129352
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013 14:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/17/2013 09:20

PO Box 4416

Reported: 07/24/2013 08:28

Houston TX 77210-4416

16006 SDG#: PEJ15-11DUP

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	26.4	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	0.0334	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.96	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	2.80	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		Analyst	Dilution Factor
					Date	Time		
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013	05:28	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013	17:48	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013	04:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013	10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013	15:00	Nelli S Markaryan	1

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

Sample Description: **WS-EB-02-071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129353**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 15:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16EB2 SDG#: PEJ15-12EB

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-02-071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129353**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 15:10 by AP

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16EB2 SDG#: PEJ15-12EB

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	
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	0.012 J	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	1.1	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	0.0020 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	0.323	0.0334	0.200	1

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

Sample Description: **WS-EB-02-071613 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129353**
 LL Group # **1404594**
 Account # **14739**

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

Collected: 07/16/2013 15:10 by AP ExxonMobil
 Submitted: 07/17/2013 09:20 Mobil Pipeline Company
 Reported: 07/24/2013 08:28 PO Box 4416
 Houston TX 77210-4416

16EB2 SDG#: PEJ15-12EB

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	0.0699 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	I131981AA	07/17/2013 18:08	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 18:08	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13199WAA026	07/19/2013 13:43	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13199WAA026	07/18/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132006256001	07/19/2013 07:22	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131981848003	07/18/2013 18:49	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131985713003	07/18/2013 05:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131981848003	07/18/2013 10:24	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131985713003	07/17/2013 15:00	Nelli S Markaryan	1

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

Sample Description: **WS-TB-98-071613 Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7129354**
LL Group # **1404594**
Account # **14739**

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

Collected: 07/16/2013

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16T98 SDG#: PEJ15-13TB*

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-98-071613 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7129354
LL Group # 1404594
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/16/2013

ExxonMobil

Submitted: 07/17/2013 09:20

Mobil Pipeline Company

Reported: 07/24/2013 08:28

PO Box 4416

Houston TX 77210-4416

16T98 SDG#: PEJ15-13TB*

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	I131981AA	07/17/2013 18:29	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131981AA	07/17/2013 18:29	Sara E Johnson	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/24/13 at 08:28 AM

Group Number: 1404594

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: I131981AA	Sample number(s): 7129339-7129351, 7129353-7129354								
Acetone	N.D.	3.0	5.0	ug/l	98		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	79		61-130		
Benzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	93		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	98		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	91		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	86		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	83		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	110		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	94		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	85		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	99		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	75		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	108		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	90		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	92		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	98		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	51		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	93		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	96		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	96		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	107		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	93		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	84		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	99		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	92		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	89		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	72		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	95		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	86		61-125		

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1404594

Reported: 07/24/13 at 08:28 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS D %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	94		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	85		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	84		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	94		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Styrene	N.D.	0.1	0.5	ug/l	97		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	95		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	95		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	118		65-131		
Toluene	N.D.	0.1	0.5	ug/l	99		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	89		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	90		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	92		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	89		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	96		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	82		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	97		80-120		

Batch number: 13199WAA026

Sample number(s): 7129339-7129351, 7129353

Acenaphthene	N.D.	0.010	0.050	ug/l	102		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	106		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	104		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	104		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	103		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	116		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	112		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	109		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	101		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	105		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	109		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	101		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	109		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	101		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	93		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	102		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	106		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	103		71-116		

Batch number: 131981848003

Sample number(s): 7129339-7129353

Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	102		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	106		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	101		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	101		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	105		90-110		

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/24/13 at 08:28 AM

Group Number: 1404594

<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: 131985713003	Sample number(s): 7129339-7129353								
Mercury	N.D.	0.00006	0.00020	mg/l	108		80-120		
		0							

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: I131981AA	Sample number(s): 7129339-7129351,7129353-7129354 UNSPK: 7129349								
Acetone	85	89	57-163	4	30				
Allyl Chloride	84	88	67-139	5	30				
Benzene	106	108	87-126	2	30				
Bromobenzene	95	97	80-123	2	30				
Bromochloromethane	100	103	82-125	3	30				
Bromodichloromethane	95	97	82-133	2	30				
Bromoform	83	87	60-138	4	30				
Bromomethane	89	87	41-145	2	30				
2-Butanone	107	104	63-146	4	30				
n-Butylbenzene	104	105	83-131	1	30				
sec-Butylbenzene	105	107	84-128	2	30				
tert-Butylbenzene	102	104	84-135	2	30				
Carbon Tetrachloride	105	106	81-148	1	30				
Chlorobenzene	107	107	78-133	1	30				
Chloroethane	93	91	70-139	2	30				
Chloroform	104	107	86-136	3	30				
Chloromethane	82	80	55-152	2	30				
2-Chlorotoluene	102	104	81-120	2	30				
4-Chlorotoluene	102	105	82-119	2	30				
1,2-Dibromo-3-chloropropane	109	102	43-143	7	30				
Dibromochloromethane	92	95	79-125	3	30				
1,2-Dibromoethane	98	101	84-127	3	30				
Dibromomethane	95	97	83-126	1	30				
1,2-Dichlorobenzene	102	104	83-117	2	30				
1,3-Dichlorobenzene	102	105	81-118	3	30				
1,4-Dichlorobenzene	102	104	79-120	2	30				
Dichlorodifluoromethane	56	54	28-136	3	30				
1,1-Dichloroethane	99	102	88-136	3	30				
1,2-Dichloroethane	97	98	82-135	1	30				
1,1-Dichloroethene	106	112	83-150	6	30				
cis-1,2-Dichloroethene	102	106	82-129	4	30				
trans-1,2-Dichloroethene	108	112	88-127	4	30				
Dichlorofluoromethane	119	115	59-176	3	30				
1,2-Dichloropropane	104	107	91-126	3	30				
1,3-Dichloropropane	97	98	80-127	2	30				
2,2-Dichloropropane	91	95	80-134	4	30				
1,1-Dichloropropene	110	112	86-139	2	30				
cis-1,3-Dichloropropene	93	96	74-132	3	30				
trans-1,3-Dichloropropene	90	94	71-128	4	30				
Ethyl ether	98	106	67-127	8	30				

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/24/13 at 08:28 AM

Group Number: 1404594

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Ethylbenzene	104	105	80-140	1	30				
Freon 113	108	112	87-158	4	30				
Hexachlorobutadiene	92	91	65-128	2	30				
Isopropylbenzene	106	107	81-133	1	30				
p-Isopropyltoluene	102	105	84-124	3	30				
Methyl Tertiary Butyl Ether	85	91	82-132	7	30				
4-Methyl-2-Pentanone	84	88	69-149	5	30				
Methylene Chloride	99	105	84-122	6	30				
n-Propylbenzene	104	107	79-131	2	30				
Styrene	101	102	63-151	1	30				
1,1,1,2-Tetrachloroethane	99	101	87-126	2	30				
1,1,2,2-Tetrachloroethane	95	99	75-131	4	30				
Tetrachloroethene	104	104	75-129	1	30				
Tetrahydrofuran	112	105	56-154	6	30				
Toluene	108	109	83-127	1	30				
1,2,3-Trichlorobenzene	90	91	73-125	1	30				
1,2,4-Trichlorobenzene	91	94	77-120	3	30				
1,1,1-Trichloroethane	100	102	85-140	2	30				
1,1,2-Trichloroethane	99	102	85-129	3	30				
Trichloroethene	109	111	85-131	2	30				
Trichlorofluoromethane	97	97	67-161	1	30				
1,2,3-Trichloropropane	94	101	76-120	7	30				
1,2,4-Trimethylbenzene	101	104	87-126	3	30				
1,3,5-Trimethylbenzene	102	104	89-129	2	30				
Vinyl Chloride	90	88	65-151	2	30				
Xylene (Total)	105	105	81-137	0	30				

Batch number: 13199WAA026 Sample number(s): 7129339-7129351,7129353 UNSPK: 7129349

Acenaphthene	85	85	59-127	0	30				
Acenaphthylene	101	101	33-146	0	30				
Anthracene	21*	23*	69-119	8	30				
Benzo(a)anthracene	71	75	67-124	4	30				
Benzo(a)pyrene	38*	43*	64-123	11	30				
Benzo(b)fluoranthene	83	89	61-133	7	30				
Benzo(g,h,i)perylene	66	76	36-138	14	30				
Benzo(k)fluoranthene	78	86	59-128	9	30				
Chrysene	81	85	62-118	5	30				
Dibenz(a,h)anthracene	72	84	32-141	15	30				
Fluoranthene	104	104	65-123	0	30				
Fluorene	100	99	69-124	1	30				
Indeno(1,2,3-cd)pyrene	70	81	29-143	13	30				
1-Methylnaphthalene	98	100	67-117	1	30				
2-Methylnaphthalene	91	92	71-126	1	30				
Naphthalene	102	104	58-131	2	30				
Phenanthrene	102	102	67-117	0	30				
Pyrene	72	71	59-125	1	30				

Batch number: 131981848003 Sample number(s): 7129339-7129353 UNSPK: 7129349 BKG: 7129349

Arsenic	105	106	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	105	105	78-118	0	20	0.0331	0.0334	1	20
Cadmium	103	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	93	101	81-118	3	20	5.90	5.96	1	20

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/24/13 at 08:28 AM

Group Number: 1404594

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>
Chromium	103	103	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	107	107	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	94	100	75-125	3	20	2.76	2.80	1	20
Nickel	106	107	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	104	103	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	100	101	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	105	105	90-111	0	20	N.D.	N.D.	0 (1)	20
Batch number: 131985713003	Sample number(s): 7129339-7129353 UNSPK: 7129349 BKG: 7129349								
Mercury	104	108	80-120	3	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: I131981AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7129339	99	104	97	93
7129340	99	105	98	93
7129341	99	106	97	93
7129342	99	106	98	92
7129343	99	107	97	92
7129344	99	103	97	92
7129345	98	104	98	92
7129346	99	103	97	91
7129347	99	101	98	92
7129348	99	103	97	91
7129349	99	103	97	93
7129350	97	99	99	99
7129351	98	101	99	99
7129353	99	102	97	92
7129354	99	103	97	92
Blank	97	100	98	92
LCS	97	97	99	97
MS	97	99	99	99
MSD	98	101	99	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13199WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7129339	100	65	97
7129340	95	65	94

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/24/13 at 08:28 AM

Group Number: 1404594

Surrogate Quality Control

7129341	93	60*	94
7129342	99	74	97
7129343	96	71	94
7129344	96	70	95
7129345	98	81	97
7129346	100	73	98
7129347	97	71	95
7129348	95	99	97
7129349	91	52*	93
7129350	98	62	100
7129351	99	72	101
7129353	103	102	97
Blank	93	104	89
LCS	101	113	102
MS	98	62	100
MSD	99	72	101
<hr/>			
Limits:	64-120	62-141	58-134

*- Outside of specification

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories

Acct. # 14739 Group # 1404594 Sample # 7129339-54
 For Lancaster Laboratories use only
 Instructions on reverse side correspond with circled numbers.

1 of 2

1 Client Information				4 Matrix				5 Analyses Requested								6 Preservation Codes		6 Remarks	
Facility #/SID <u>MAY FLOWER PIPELINE INTERCUT</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> Surface <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air				Preservation Code H N Total # of Containers VOCS - 8260 PAHs - 8270 PPEA METALS + TRACEABLES, COY W, V, M, S DISS METALS *											
Site Address <u>MAYFLOWER, AR</u>		ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE		Consultant/Office <u>ARCADIS</u>		Consultant PM <u>STEVE BARRICK</u>		Consultant Phone # <u>919 202 6779</u>		Sampler <u>A. PARRINELLO / B. COOPER</u>							
2 Sample Identification			3 Collected		Grab		Composite												
	Date	Time																	
<u>WS-003 (SURFACE)</u>	<u>071613</u>	<u>745</u>	<input checked="" type="checkbox"/>																
<u>WS-018 (1.5-2.0)</u>	<u>071613</u>	<u>720</u>	<input checked="" type="checkbox"/>																
<u>WS-011 (1.5-2.0)</u>	<u>071613</u>	<u>810</u>	<input checked="" type="checkbox"/>																
<u>WS-014 (1.5-2.0)</u>	<u>071613</u>	<u>945</u>	<input checked="" type="checkbox"/>																
<u>WS-012 (1.5-2.0)</u>	<u>071613</u>	<u>1010</u>	<input checked="" type="checkbox"/>																
<u>WS-010 (1.5-2.0)</u>	<u>071613</u>	<u>1035</u>	<input checked="" type="checkbox"/>																
<u>WS-005 (SURFACE)</u>	<u>071613</u>	<u>1235</u>	<input checked="" type="checkbox"/>																
<u>WS-002 (SURFACE)</u>	<u>071613</u>	<u>1205</u>	<input checked="" type="checkbox"/>																
<u>WS-001 (0.5-1.0)</u>	<u>071613</u>	<u>1345</u>	<input checked="" type="checkbox"/>																
<u>WS-007 (0.5-1.0)</u>	<u>071613</u>	<u>1400</u>	<input checked="" type="checkbox"/>																
<u>WS-006 (0.5-1.0)</u>	<u>071613</u>	<u>1415</u>	<input checked="" type="checkbox"/>																
<u>WS-007 (0.5-1.0)</u>	<u>071613</u>	<u>1400</u>	<input checked="" type="checkbox"/>																
								7 Turnaround Time Requested (TAT) (please circle)		8 Data Package (circle if required)				9 Relinquished by		Date		Time	
								Standard <u>5 day</u> 4 day 72 hour 48 hour 24 hour		Type I - Full		Locus EIM (default)		Relinquished by <u>[Signature]</u> Date <u>7/16/13</u> Time <u>1630</u> Received by _____ Date _____ Time _____ Relinquished by _____ Date _____ Time _____ Received by _____ Date _____ Time _____ Relinquished by _____ Date _____ Time _____ Received by _____ Date _____ Time _____					
								Type VI (Raw Data)		Other _____		Relinquished by Commercial Carrier UPS _____ FedEx <input checked="" type="checkbox"/> Other _____ Received by <u>[Signature]</u> Date <u>7/17/13</u> Time <u>0920</u>							
								Other _____		Temperature Upon Receipt <u>0.4-2.4 °C</u>		Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories

Acct. # 14739 Group # 1404594 Sample # 7129339-54
For Lancaster Laboratories use only
 Instructions on reverse side correspond with circled numbers.

2 of 2

1 Client Information				4 Matrix				5 Analyses Requested							6 Remarks			
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	Air <input type="checkbox"/>	Preservation Code							SCR#: _____		Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other		
Site Address <u>MAYFLOWER, AR</u>							Total # of Containers VOCS - 8260 PAHS - 8270 PERA METALS + HARDNESS, Ca, N, V, Mg DISS. METALS *	H	N							* LAB TO FILTER AND PRESERVE UPON RECEIPT.		
ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE																
Consultant/Office <u>ARCADIS</u>																		
Consultant PM <u>STEVE BARRICK</u>		Consultant Phone # <u>919 202 6779</u>																
Sampler <u>A. PARRINELLO / B. LOVEGREN</u>				3														
2 Sample Identification		Collected		Grab	Composite													
Date	Time																	
<u>WS-EB-02-071613</u>	<u>071613</u>	<u>150</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>									<u>EQUIPMENT BLANK</u>			
<u>WS-TB-98-071613</u>	<u>071613</u>	<u>---</u>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>									<u>TRIP BLANK</u>			

7 Turnaround Time Requested (TAT) (please circle) Standard <u>5 day</u> 4 day 72 hour 48 hour 24 hour		Relinquished by <u>[Signature]</u>		Date <u>7/16/13</u>	Time <u>1630</u>	Received by	Date	Time
		Relinquished by		Date	Time	Received by	Date	Time
Relinquished by		Date	Time	Received by	Date	Time	9	
Relinquished by Commercial Carrier		UPS _____ FedEx <input checked="" type="checkbox"/> Other _____		Received by <u>[Signature]</u>	Date <u>7/17/13</u>	Time <u>0920</u>		
8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____		EDD (circle if required) Locus EIM (default) Other _____		Temperature Upon Receipt <u>04-2.4 °C</u>		Custody Seals Intact? Yes No		

Rachel L. Kreamer

A# 14739 Gr # 1404594 Samples 7129339-54

From: Mott, Lyndi [Lyndi.Mott@arcadis-us.com]
Sent: Wednesday, July 17, 2013 3:22 PM
To: Rachel L. Kreamer
Cc: Kathy Klinefelter; Chandler, Jennifer; Parrinello, Auguste; Lipka, Shelby
Subject: RE: MS/MSD sample for surface waters received Wednesday, 7/17

Rachel,

According to the field notes, the MS/MSD was collected at WS-006(0.5-1.0)071613. The coc is incorrect.

Lyndi Mott

-----Original Message-----

From: Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]
Sent: Wednesday, July 17, 2013 1:22 PM
To: Mott, Lyndi
Cc: Kathy Klinefelter
Subject: MS/MSD sample for surface waters received Wednesday, 7/17

Lyndi,

I attached the chain and doc log for today's surface water samples. The chain lists the MS/MSD as WS-007(0.5-1.0)071613 but the labels say WS-006(0.5-1.0)071613. The collection information on the labels is 7/16/13 @ 1415. Can you please let me know which is correct?

Thanks
Rachel

-----Original Message-----

From: 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]
Sent: Wednesday, July 17, 2013 2:17 PM
To: Rachel L. Kreamer
Subject:

This E-mail was sent from "RNP367EC2" (MP 4001/LD140).

Scan Date: 07.17.2013 14:16:41 (-0400)
Queries to: 39Scanner@lancasterlabs.com

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Environmental Sample Administration
Receipt Documentation Log

1404594

Client/Project: XOM Mayflower

Shipping Container Sealed: YES NO

Date of Receipt: 7/17/13

Custody Seal Present * : YES NO

Time of Receipt: 0920

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

Source Code: 50-1

Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.4	TB	WI	Y	B	
2	↓	2.4	↓	↓	↓	↓	
3	_____						
4	_____						
5	_____						
6	_____						

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

Paperwork Discrepancy/Unpacking Problems:

MS, MSD Samples = WS-006 (0.5-1.0) 07/16/13 coll.
7/16/13 @ 1415

Unpacker Signature/Emp#: D. Meslund / 208 Date/Time: 7/17/13 / 0940

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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