

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

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

July 25, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/18/2013  
Group Number: 1404972  
SDG: PEJ20  
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)071713 Grab Surface Water	7130796
WS-018(Surface)071713 Grab Surface Water	7130797
WS-011(Surface)071713 Grab Surface Water	7130798
WS-014(1.5-2.0)071713 Grab Surface Water	7130799
WS-012(1.5-2.0)071713 Grab Surface Water	7130800
WS-010(1.5-2.0)071713 Grab Surface Water	7130801
WS-005(Surface)071713 Grab Surface Water	7130802
WS-002(Surface)071713 Grab Surface Water	7130803
WS-001(0.5-1.0)071713 Grab Surface Water	7130804
WS-007(0.5-1.0)071713 Grab Surface Water	7130805
WS-006(0.5-1.0)071713 Grab Surface Water	7130806
DUP-WS-57-071713 Grab Surface Water	7130807
WS-TB-99-071713 Water	7130808
WS-EB-03-071713 Grab Surface Water	7130809

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
ELECTRONIC COPY TO	ARCADIS	Attn: Rhiannon Parmalee

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

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

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Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1404972

**General Comments:**

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: 13200WAB026 (Sample number(s): 7130796-7130804, 7130806-7130807, 7130809)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7130796, 7130797, 7130800

Batch #: 13204WAC026 (Sample number(s): 7130805 UNSPK: P134322)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 1-Methylnaphthalene

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

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

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7130805, MS, MSD

Sample #s: 7130798, 7130799, 7130801, 7130802, 7130803, 7130804, 7130806, 7130807, 7130809

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

Sample #s: 7130796, 7130797, 7130800

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Sample #s: 7130805

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. The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
1-methylnaphthalene

Sample Description: WS-003 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130796  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 08:20 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17003 SDG#: PEJ20-01

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) 071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130796**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 08:20 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17003 SDG#: PEJ20-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.024 J	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.020 J	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.052 J	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	0.018 J	0.011	0.053	1
08357	Chrysene	218-01-9	0.029 J	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.021 J	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	0.56	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.038 J	0.011	0.053	1

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

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	27.4	0.033	0.20	1

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

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Sample Description: **WS-003 (Surface) 071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130796**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 08:20 by AP ExxonMobil  
 Submitted: 07/18/2013 09:25 Mobil Pipeline Company  
 Reported: 07/25/2013 12:59 PO Box 4416  
 Houston TX 77210-4416

17003 SDG#: PEJ20-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0674	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.19	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	2.91	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 00:46	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 00:46	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 20:24	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:37	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:26	Damary Valentín	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-018 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130797  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:35 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17018 SDG#: PEJ20-02

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 (Surface) 071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130797**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 11:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17018 SDG#: PEJ20-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.38	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

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.

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	26.5	0.033	0.20	1

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

Sample Description: WS-018 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130797  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17018 SDG#: PEJ20-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0458	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
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	2.82	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
<b>SW-846 6010B</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
<b>SW-846 7470A</b>			<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	

### 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	C131992AA	07/19/2013 01:08	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 01:08	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 20:51	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:41	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-011(Surface)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130798**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 08:10 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17011 SDG#: PEJ20-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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(Surface)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130798**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 08:10 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17011 SDG#: PEJ20-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.16	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	25.6	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
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

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

Sample Description: WS-011(Surface)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130798  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 08:10 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17011 SDG#: PEJ20-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.75	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0020 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.72	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 01:31	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 01:31	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 21:18	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:52	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-014(1.5-2.0)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130799**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:00 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17014 SDG#: PEJ20-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130799**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:00 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17014 SDG#: PEJ20-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	0.16	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	24.6	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0313	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(1.5-2.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130799  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 10:00 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17014 SDG#: PEJ20-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.58	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0024 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.60	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0021 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 01:53	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 01:53	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 21:45	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:55	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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



Sample Description: **WS-012(1.5-2.0)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130800**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:20 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17012 SDG#: PEJ20-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130800**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:20 by AP ExxonMobil  
 Submitted: 07/18/2013 09:25 Mobil Pipeline Company  
 Reported: 07/25/2013 12:59 PO Box 4416  
 Houston TX 77210-4416

17012 SDG#: PEJ20-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.10	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

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.

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	24.8	0.033	0.20	1

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

Sample Description: WS-012(1.5-2.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130800  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 10:20 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17012 SDG#: PEJ20-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0268	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.62	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0020 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.61	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0024 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 02:15	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 02:15	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 22:12	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/21/2013 23:11	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:59	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-010(1.5-2.0)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130801**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:45 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17010 SDG#: PEJ20-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130801**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 10:45 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17010 SDG#: PEJ20-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	0.13	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	25.2	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0339	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(1.5-2.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130801  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 10:45 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17010 SDG#: PEJ20-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.71	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0019 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.66	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 02:38	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 02:38	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 22:39	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:02	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-005 (Surface) 071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130802**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 11:15 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17005 SDG#: PEJ20-07

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

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

Sample Description: WS-005 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130802  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17005 SDG#: PEJ20-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.11	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.036 J	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals</b>		<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
06256	Total Hardness as CaCO3	471-34-1	25.9	0.033	0.20	1
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0320	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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



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Sample Description: WS-005 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130802  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:15 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17005 SDG#: PEJ20-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	6.03	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.63	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 03:00	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 03:00	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 23:06	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 17:16	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-002 (Surface) 071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130803**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 11:50 by AP

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

Submitted: 07/18/2013 09:25

Reported: 07/25/2013 12:59

17002 SDG#: PEJ20-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130803  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:50 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17002 SDG#: PEJ20-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.12	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	25.1	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0241	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-002 (Surface) 071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130803  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 11:50 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17002 SDG#: PEJ20-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.71	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	2.64	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 03:22	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 03:22	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/22/2013 23:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/21/2013 23:15	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:06	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-001(0.5-1.0)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130804**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 12:30 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17001 SDG#: PEJ20-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130804**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 12:30 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17001 SDG#: PEJ20-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.20	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	25.1	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0341	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-001(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130804  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:30 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17001 SDG#: PEJ20-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.68	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	2.64	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 03:45	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 03:45	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/23/2013 00:01	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:10	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-007(0.5-1.0)071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130805**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 12:40 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17007 SDG#: PEJ20-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
02898	Acetone	67-64-1	5.8	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	1.2 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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



Sample Description: WS-007(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130805  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:40 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17007 SDG#: PEJ20-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.7	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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
08357	Acenaphthene	83-32-9	0.091	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.17	0.010	0.051	1
08357	Anthracene	120-12-7	0.17	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.35	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.34	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.70	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.34	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.52	0.010	0.051	1
08357	Chrysene	218-01-9	0.70	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.094	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.66	0.010	0.051	1
08357	Fluorene	86-73-7	0.11	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.41	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.036 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.043 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.031 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.19	0.030	0.051	1
08357	Pyrene	129-00-0	0.76	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.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:  
1-methylnaphthalene

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

Sample Description: WS-007(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130805  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:40 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17007 SDG#: PEJ20-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals SM 2340 B-1997</b>			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	20.4	0.033	0.20	1
<b>SW-846 6010B</b>			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0081 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0818	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	4.37	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0057 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0119 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.31	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0062 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	0.0100	0.0020	0.0050	1
<b>SW-846 7470A</b>			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	C131992AA	07/19/2013 04:07	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 04:07	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13204WAC026	07/25/2013 03:57	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13204WAC026	07/23/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:13	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:57	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130805  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:40 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17007 SDG#: PEJ20-10

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130806  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:50 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17006 SDG#: PEJ20-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	3.4 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.4 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130806  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:50 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17006 SDG#: PEJ20-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.015 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	0.011 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.016 J	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	0.24	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.22	0.010	0.052	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	25.2	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0515	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-006(0.5-1.0)071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130806  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 12:50 by AP ExxonMobil  
Mobil Pipeline Company  
Submitted: 07/18/2013 09:25 PO Box 4416  
Reported: 07/25/2013 12:59 Houston TX 77210-4416

17006 SDG#: PEJ20-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	5.58	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0023 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.74	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0025 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	0.0041 J	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 04:29	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 04:29	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/23/2013 00:55	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:17	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 09:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: DUP-WS-57-071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130807  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17D57 SDG#: PEJ20-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.4 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: DUP-WS-57-071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130807  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17D57 SDG#: PEJ20-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.017 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	0.012 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	0.018 J	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	0.21	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.59	0.010	0.052	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	31.9	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	0.0111 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.133	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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



Sample Description: DUP-WS-57-071713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130807  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/18/2013 09:25

PO Box 4416

Reported: 07/25/2013 12:59

Houston TX 77210-4416

17D57 SDG#: PEJ20-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	6.29	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0138 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0144 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.94	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0094 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	0.0232	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/19/2013 04:51	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/19/2013 04:51	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/23/2013 01:22	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:20	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 10:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

Sample Description: **WS-TB-99-071713 Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130808**  
LL Group # **1404972**  
Account # **14739**

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

Collected: 07/17/2013

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17T99 SDG#: PEJ20-13TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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-99-071713 Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7130808  
LL Group # 1404972  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/17/2013

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17T99 SDG#: PEJ20-13TB

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	C131992AA	07/18/2013 23:17	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/18/2013 23:17	Kevin A Sposito	1

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

Sample Description: **WS-EB-03-071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130809**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 14:30 by AP

ExxonMobil

Submitted: 07/18/2013 09:25

Mobil Pipeline Company

Reported: 07/25/2013 12:59

PO Box 4416

Houston TX 77210-4416

17E03 SDG#: PEJ20-14EB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
	<b>purge</b>					
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-03-071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130809**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 14:30 by AP ExxonMobil  
 Submitted: 07/18/2013 09:25 Mobil Pipeline Company  
 Reported: 07/25/2013 12:59 PO Box 4416  
 Houston TX 77210-4416

17E03 SDG#: PEJ20-14EB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS</b>	<b>Volatiles</b>	<b>SW-846 8260B 25mL</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
		<b>purge</b>				
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
<b>GC/MS</b>	<b>Semivolatiles</b>	<b>SW-846 8270C SIM</b>	<b>ug/l</b>	<b>ug/l</b>	<b>ug/l</b>	
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	0.076	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

<b>Metals</b>	<b>SM 2340 B-1997</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
06256	Total Hardness as CaCO3	471-34-1	0.40	0.033	0.20	1
	<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.00075 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

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Sample Description: **WS-EB-03-071713 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7130809**  
 LL Group # **1404972**  
 Account # **14739**

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

Collected: 07/17/2013 14:30 by AP ExxonMobil  
 Mobil Pipeline Company  
 Submitted: 07/18/2013 09:25 PO Box 4416  
 Reported: 07/25/2013 12:59 Houston TX 77210-4416

17E03 SDG#: PEJ20-14EB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	0.0946 J	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0040 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	0.0392 J	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0020 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	C131992AA	07/18/2013 23:39	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131992AA	07/18/2013 23:39	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13200WAB026	07/23/2013 01:49	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13200WAB026	07/19/2013 13:30	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132026256001	07/21/2013 06:11	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07046	Barium	SW-846 6010B	1	131991848002	07/21/2013 23:19	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
01750	Calcium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07051	Chromium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07055	Lead	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07061	Nickel	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07036	Selenium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07066	Silver	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131991848002	07/20/2013 18:24	John P Hook	1
00259	Mercury	SW-846 7470A	1	131995713004	07/19/2013 10:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131991848002	07/20/2013 08:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131995713004	07/18/2013 15:20	Nelli S Markaryan	1

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 07/25/13 at 12:59 PM

Group Number: 1404972

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: C131992AA	Sample number(s): 7130796-7130809								
Acetone	N.D.	3.0	5.0	ug/l	99		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	93		61-130		
Benzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	103		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	100		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	100		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	102		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	105		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	98		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	105		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	100		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	104		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	98		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	99		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	100		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	101		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	104		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	111		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	99		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	111		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	98		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	113		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	104		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	103		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	100		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	96		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	99		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	100		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  
Reported: 07/25/13 at 12:59 PM

Group Number: 1404972

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	96		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	99		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	103		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	98		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Styrene	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	102		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	99		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	101		65-131		
Toluene	N.D.	0.1	0.5	ug/l	100		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	99		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	99		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	102		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	104		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	105		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	109		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	103		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	104		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	99		80-120		

Batch number: 13200WAB026

Sample number(s): 7130796-7130804, 7130806-7130807, 7130809

Acenaphthene	N.D.	0.010	0.050	ug/l	94	97	65-124	3	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	95	99	72-113	3	30
Anthracene	N.D.	0.010	0.050	ug/l	98	97	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	99	95	75-115	4	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	95	94	72-120	1	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	105	110	74-130	4	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	108	102	63-121	6	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	107	99	74-118	7	30
Chrysene	N.D.	0.010	0.050	ug/l	98	96	75-112	2	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	99	87	66-122	13	30
Fluoranthene	N.D.	0.010	0.050	ug/l	103	101	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	91	94	74-115	3	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	104	97	66-122	7	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	93	96	72-114	4	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	86	89	74-119	4	30
Naphthalene	N.D.	0.030	0.050	ug/l	93	97	67-118	4	30
Phenanthrene	N.D.	0.030	0.050	ug/l	99	100	72-109	1	30
Pyrene	N.D.	0.010	0.050	ug/l	98	98	71-116	0	30

Batch number: 13204WAC026

Sample number(s): 7130805

Acenaphthene	N.D.	0.010	0.050	ug/l	105		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	112		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	106		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	105		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	107		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	105		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	106		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	113		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	103		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	102		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	107		73-116		

\*- 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: 1404972

Reported: 07/25/13 at 12:59 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Fluorene	N.D.	0.010	0.050	ug/l	104		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	105		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	115*		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	113		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	102		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	101		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	106		71-116		

Batch number: 131991848002

Sample number(s): 7130796-7130807,7130809

Arsenic	N.D.	0.0068	0.0200	mg/l	101		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	100		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	97		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	100		88-110		
Magnesium	0.0297 J	0.0167	0.100	mg/l	97		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	100		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	114		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	104		90-110		

Batch number: 131995713004

Sample number(s): 7130796-7130807,7130809

Mercury	N.D.	0.00006	0.00020	mg/l	106		80-120		
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## Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: C131992AA	Sample number(s): 7130796-7130809 UNSPK: P127758								
Acetone	102	111	57-163	8	30				
Allyl Chloride	98	99	67-139	1	30				
Benzene	106	107	87-126	1	30				
Bromobenzene	104	103	80-123	1	30				
Bromochloromethane	108	109	82-125	1	30				
Bromodichloromethane	105	107	82-133	3	30				
Bromoform	97	99	60-138	2	30				
Bromomethane	110	114	41-145	4	30				
2-Butanone	110	117	63-146	7	30				
n-Butylbenzene	99	92	83-131	7	30				
sec-Butylbenzene	102	95	84-128	7	30				
tert-Butylbenzene	102	96	84-135	6	30				
Carbon Tetrachloride	118	116	81-148	2	30				
Chlorobenzene	108	108	78-133	0	30				
Chloroethane	109	111	70-139	2	30				
Chloroform	111	113	86-136	2	30				
Chloromethane	108	110	55-152	1	30				
2-Chlorotoluene	102	100	81-120	2	30				
4-Chlorotoluene	102	100	82-119	2	30				
1,2-Dibromo-3-chloropropane	106	110	43-143	4	30				

\*- Outside of specification

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

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 07/25/13 at 12:59 PM

Group Number: 1404972

### Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Dibromochloromethane	101	105	79-125	4	30				
1,2-Dibromoethane	105	108	84-127	3	30				
Dibromomethane	105	107	83-126	2	30				
1,2-Dichlorobenzene	104	102	83-117	2	30				
1,3-Dichlorobenzene	104	102	81-118	2	30				
1,4-Dichlorobenzene	103	102	79-120	1	30				
Dichlorodifluoromethane	127	122	28-136	4	30				
1,1-Dichloroethane	107	109	88-136	2	30				
1,2-Dichloroethane	112	115	82-135	2	30				
1,1-Dichloroethene	110	109	83-150	1	30				
cis-1,2-Dichloroethene	108	109	82-129	1	30				
trans-1,2-Dichloroethene	110	112	88-127	2	30				
Dichlorofluoromethane	125	128	59-176	2	30				
1,2-Dichloropropane	107	109	91-126	2	30				
1,3-Dichloropropane	102	105	80-127	2	30				
2,2-Dichloropropane	106	108	80-134	2	30				
1,1-Dichloropropene	116	115	86-139	1	30				
cis-1,3-Dichloropropene	103	106	74-132	4	30				
trans-1,3-Dichloropropene	100	102	71-128	2	30				
Ethyl ether	96	100	67-127	4	30				
Ethylbenzene	105	103	80-140	2	30				
Freon 113	112	105	87-158	6	30				
Hexachlorobutadiene	97	86	65-128	12	30				
Isopropylbenzene	105	102	81-133	3	30				
p-Isopropyltoluene	99	94	84-124	5	30				
Methyl Tertiary Butyl Ether	100	103	82-132	3	30				
4-Methyl-2-Pentanone	101	102	69-149	1	30				
Methylene Chloride	103	113	84-122	9	30				
n-Propylbenzene	102	99	79-131	4	30				
Styrene	103	104	63-151	0	30				
1,1,1,2-Tetrachloroethane	106	106	87-126	1	30				
1,1,2,2-Tetrachloroethane	97	100	75-131	2	30				
Tetrachloroethene	111	109	75-129	2	30				
Tetrahydrofuran	106	113	56-154	6	30				
Toluene	108	108	83-127	0	30				
1,2,3-Trichlorobenzene	89	85	73-125	5	30				
1,2,4-Trichlorobenzene	94	89	77-120	5	30				
1,1,1-Trichloroethane	113	114	85-140	1	30				
1,1,2-Trichloroethane	104	107	85-129	3	30				
Trichloroethene	114	114	85-131	0	30				
Trichlorofluoromethane	125	124	67-161	1	30				
1,2,3-Trichloropropane	101	105	76-120	3	30				
1,2,4-Trimethylbenzene	102	99	87-126	3	30				
1,3,5-Trimethylbenzene	102	99	89-129	3	30				
Vinyl Chloride	115	117	65-151	2	30				
Xylene (Total)	105	103	81-137	2	30				

Batch number: 13204WAC026	Sample number(s): 7130805	UNSPK: P134322
Acenaphthene	76	79
Acenaphthylene	104	92
Anthracene	13*	35*
Benzo(a)anthracene	69	66*

\*- 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: 07/25/13 at 12:59 PM

Group Number: 1404972

### Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Benzo(a)pyrene	33*	38*	64-123	16	30				
Benzo(b)fluoranthene	74	57*	61-133	26	30				
Benzo(g,h,i)perylene	55	42	36-138	28	30				
Benzo(k)fluoranthene	68	54*	59-128	23	30				
Chrysene	70	59*	62-118	17	30				
Dibenz(a,h)anthracene	61	45	32-141	30	30				
Fluoranthene	86	73	65-123	16	30				
Fluorene	94	84	69-124	11	30				
Indeno(1,2,3-cd)pyrene	62	45	29-143	32*	30				
1-Methylnaphthalene	108	95	67-117	14	30				
2-Methylnaphthalene	107	94	71-126	13	30				
Naphthalene	97	85	58-131	13	30				
Phenanthrene	95	82	67-117	15	30				
Pyrene	56*	68	59-125	17	30				

Batch number: 131991848002	Sample number(s): 7130796-7130807,7130809	UNSPK: 7130802	BKG: 7130802
Arsenic	106	105	81-123 1 20 N.D. N.D. 0 (1) 20
Barium	102	101	78-118 1 20 0.0320 0.0313 2 20
Cadmium	99	99	83-116 0 20 N.D. N.D. 0 (1) 20
Calcium	96	97	81-118 0 20 6.03 5.91 2 20
Chromium	103	102	81-120 1 20 N.D. N.D. 0 (1) 20
Lead	100	99	75-125 1 20 N.D. N.D. 0 (1) 20
Magnesium	95	95	75-125 0 20 2.63 2.57 2 20
Nickel	105	104	86-115 1 20 N.D. N.D. 0 (1) 20
Selenium	100	99	75-125 1 20 N.D. N.D. 0 (1) 20
Silver	115	115	75-125 0 20 N.D. N.D. 0 (1) 20
Vanadium	107	105	90-111 2 20 N.D. N.D. 0 (1) 20

Batch number: 131995713004	Sample number(s): 7130796-7130807,7130809	UNSPK: 7130801	BKG: 7130801
Mercury	103	107	80-120 4 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: C131992AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7130796	101	99	100	100
7130797	100	98	100	100
7130798	101	100	99	99
7130799	101	98	100	99
7130800	101	99	100	99
7130801	100	99	100	99
7130802	101	100	99	99
7130803	101	98	99	99
7130804	101	99	100	100

\*- 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: 07/25/13 at 12:59 PM

Group Number: 1404972

### Surrogate Quality Control

7130805	101	99	100	100
7130806	101	99	99	100
7130807	101	100	100	100
7130808	101	99	100	99
7130809	99	97	100	99
Blank	101	101	99	100
LCS	101	98	100	98
MS	102	101	100	99
MSD	102	100	99	99

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

Analysis Name: PAHs in waters by SIM

Batch number: 13200WAB026

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

7130796	96	56*	93
7130797	90	50*	93
7130798	95	69	93
7130799	98	80	98
7130800	92	59*	92
7130801	88	64	90
7130802	94	83	94
7130803	91	67	92
7130804	96	69	94
7130806	84	68	84
7130807	84	70	86
7130809	99	106	95
Blank	99	111	101
LCS	95	105	94
LCSD	94	102	99

Limits: 64-120                      62-141                      58-134

Analysis Name: PAHs in waters by SIM

Batch number: 13204WAC026

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

7130805	57*	70	97
Blank	89	98	100
LCS	95	104	105
MS	78	53*	99
MSD	68	49*	86

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**

For Lancaster Laboratories use only  
 Acct. # 14739 Group # 1404972 Sample # 7130796-809  
Instructions on reverse side correspond with circled numbers.

1 of 2

<b>1 Client Information</b>				<b>4 Matrix</b>				<b>5 Analyses Requested</b>								<b>SCR#:</b> _____	
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Oil <input type="checkbox"/> Air	<input type="checkbox"/> Ground <input type="checkbox"/> Surface	<b>Preservation Code</b>								<b>6 Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other			
Site Address <u>MAYFLOWER, AR</u>						VOCs 8260 PAHs 8270 TRACE METALS CA, MG, NI, V, Cr DISS. METALS *											
ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE		<input type="checkbox"/> Composite <input type="checkbox"/> Grab	Total # of Containers VOCs 8260 PAHs 8270 TRACE METALS CA, MG, NI, V, Cr DISS. METALS *								<b>6 Remarks</b> * LAB TO FILTER AND PRESERVE UPON RECEIPT.				
Consultant/Office <u>ARCADIS</u>		Consultant Phone # <u>919 202 6779</u>															
Consultant PM <u>STEVE BARRECK</u>		Consultant Phone #															
Sampler <u>A. PARRINELLO / HANS VAN ALER</u>																	
<b>2 Sample Identification</b>																	
		<b>Collected</b>															
		Date	Time														
<u>WS-003 (SURFACE)</u>		<u>07/17/13</u>	<u>820</u>														
<u>WS-018 (SURFACE)</u>		<u>07/17/13</u>	<u>1135</u>														
<u>WS-011 (SURFACE)</u>		<u>07/17/13</u>	<u>810</u>														
<u>WS-014 (1.5-2.0)</u>		<u>07/17/13</u>	<u>1000</u>														
<u>WS-012 (1.5-2.0)</u>		<u>07/17/13</u>	<u>1020</u>														
<u>WS-010 (1.5-2.0)</u>		<u>07/17/13</u>	<u>1045</u>														
<u>WS-005 (SURFACE)</u>		<u>07/17/13</u>	<u>1115</u>														
<u>WS-002 (SURFACE)</u>		<u>07/17/13</u>	<u>1150</u>														
<u>WS-001 (0.5-1.0)</u>		<u>07/17/13</u>	<u>1230</u>														
<u>WS-007 (0.5-1.0)</u>		<u>07/17/13</u>	<u>1240</u>														
<u>WS-000 (0.5-1.0)</u>		<u>07/17/13</u>	<u>1250</u>														
<u>DUO-WS-57-07/17/13</u>		<u>07/17/13</u>	<u>-</u>														
<b>7 Turnaround Time Requested (TAT) (please circle)</b>				Relinquished by 				Date <u>7/17/13</u>		Time <u>1530</u>		Received by		Date		Time	
Standard <u>5 day</u> 4 day				Relinquished by				Date		Time		Received by		Date		Time	
72 hour      48 hour      24 hour				Relinquished by				Date		Time		Received by		Date		Time	
<b>8 Data Package (circle if required)</b>				Relinquished by Commercial Carrier													
Type I - Full		EDD (circle if required)		UPS				FedEx <u>X</u>		Other		Received by 		Date <u>7/18/13</u>		Time <u>0925</u>	
Type VI (Raw Data)		Locus EIM (default)		Temperature Upon Receipt <u>2.4-3.4 °C</u>				Custody Seals Intact?		Yes <u>(circled)</u> No							
NJ Reduced		Other															
Other																	

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 14739

For Lancaster Laboratories use only  
 Group # 1404972 Sample # 7130796-809  
Instructions on reverse side correspond with circled numbers.

2 of 2

<b>1 Client Information</b>				<b>4 Matrix</b>		<b>5 Analyses Requested</b>								SCR#: _____																											
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input type="checkbox"/> Oil <input type="checkbox"/> Air		<b>Preservation Code</b>								<b>Preservation Codes</b> H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other																											
Site Address <u>MAYFLOWER, AR</u>						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">N</td> <td style="width: 5%;">VOCs 8260</td> <td style="width: 5%;">PAHs 8270</td> <td style="width: 5%;">REPA METALS</td> <td style="width: 5%;">DIS. METALS *</td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> </table>										N	VOCs 8260	PAHs 8270	REPA METALS	DIS. METALS *																					
N	VOCs 8260	PAHs 8270	REPA METALS													DIS. METALS *																									
ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE																																							
Consultant/Office <u>ARCADIS</u>				Total # of Containers																																					
Consultant PM <u>STEVE BARRICK</u>		Consultant Phone # <u>919 202 6779</u>		Soil <input type="checkbox"/>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">Grab</td> <td style="width: 5%;">Composite</td> <td style="width: 5%;">Date</td> <td style="width: 5%;">Time</td> <td style="width: 5%;">Total # of Containers</td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> </table>								Grab	Composite	Date	Time	Total # of Containers																							
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Sampler <u>A. PARRINELLO / H. VAN KLUER</u>				Water <input checked="" type="checkbox"/>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> </table>																																			
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<b>7 Turnaround Time Requested (TAT) (please circle)</b>				Relinquished by		Date		Time		Received by		Date		Time																											
Standard <u>5 day</u> 4 day						Date		Time		Received by		Date		Time																											
72 hour      48 hour      24 hour						Date		Time		Received by		Date		Time																											
						Date		Time		Received by		Date		Time																											
<b>8 Data Package (circle if required)</b>				Relinquished by Commercial Carrier		Date		Time		Received by		Date		Time																											
Type I - Full		EDD (circle if required)		UPS		FedEx <input checked="" type="checkbox"/>		Other				7/18/13		0925																											
Type VI (Raw Data)		Locus EIM (default)																																							
NJ Reduced		Other																																							
Other																																									
Temperature Upon Receipt <u>2.4-3.4 °C</u>										Custody Seals Intact?		<u>Yes</u>		No																											

Rachel L. Kreamer

A# 14739

Gr# 1404972

Sample# 7136796-809

**From:** Chandler, Jennifer [Jennifer.Chandler@arcadis-us.com]  
**Sent:** Thursday, July 18, 2013 2:08 PM  
**To:** Rachel L. Kreamer  
**Cc:** Kathy Klinefelter  
**Subject:** RE: Collection time for sample received today

Rachel,

According to the field notes, WS-002(surface)071713 has a collection time of 1150, which matches the COC. The bottle label is incorrect.

Thanks,

Jennifer Chandler | Scientist 2 | jennifer.chandler@arcadis-us.com ARCADIS U.S., Inc. |  
630 Plaza Drive, Suite 100 | Highlands Ranch, CO, 80129 T. 303.471.3549 | F. 720.344.3535  
www.arcadis-us.com Please consider the environment before printing this email.

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

**From:** Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]  
**Sent:** Thursday, July 18, 2013 11:50 AM  
**To:** Chandler, Jennifer  
**Cc:** Kathy Klinefelter  
**Subject:** Collection time for sample received today

Jennifer,

Attached are the chain and doc log for the surface water samples we received today. Sample WS-002(surface)071713 has a collection time of 1150 on the chain. The bottle labels say 1050. Which time should we use?

Thanks  
Rachel

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

**From:** 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]  
**Sent:** Thursday, July 18, 2013 1:45 PM  
**To:** Rachel L. Kreamer  
**Subject:**

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

Scan Date: 07.18.2013 13:44:41 (-0400)  
Queries to: 39Scanner@lancasterlabs.com

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Environmental Sample Administration 1404972  
 Receipt Documentation Log

Client/Project: XOM Mayflower  
 Date of Receipt: 7/18/13  
 Time of Receipt: 0925  
 Source Code: 50-1

Shipping Container Sealed:  YES NO  
 Custody Seal Present \* :  YES NO  
 \* Custody seal was intact unless otherwise noted in the discrepancy section  
 Package:  Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	3.4	TB	WI	Y	B	
2	↓	2.4	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:  
WS-002 time on label = 1050

Unpacker Signature/Emp#: [Signature] / 208 Date/Time: 7/18/13 / 0940

Issued by Dept. 6042 Management



# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	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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