

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

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

May 28, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/23/2013  
Group Number: 1391967  
SDG: PEH74  
PO Number: 4510076246  
Release Number: MAYFLOWER 1406  
State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
WS-003(Surface)052213 Grab Surface Water	7067256
WS-002(Surface)052213 Grab Surface Water	7067257
WS-BKG-002(Surface)052213 Grab Surface Water	7067258
WS-005(Surface)052213 Grab Surface Water	7067259
WS-008(Surface)052213 Grab Surface Water	7067260
WS-001(Surface)052213 Grab Surface Water	7067261
WS-001(0.5-1.0)052213 Grab Surface Water	7067262
WS-004(Surface)052213 Grab Surface Water	7067263
WS-004(0.5-1.0)052213 Grab Surface Water	7067264
WS-007(Surface)052213 Grab Surface Water	7067265
WS-007(0.5-1.0)052213 Grab Surface Water	7067266
WS-006(Surface)052213 Grab Surface Water	7067267
WS-006(0.5-1.0)052213 Grab Surface Water	7067268
DUP-WS-29-052213 Grab Surface Water	7067269
WS-TB-50-052213 Water	7067270

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

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

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Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1391967

**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 #: 13143WAE026 (Sample number(s): 7067256-7067269)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7067260, 7067261, 7067262, 7067263, 7067264, 7067265, 7067266, 7067267, 7067268, 7067269

Sample #s: 7067256, 7067257, 7067258, 7067259, 7067264, 7067265, 7067266, 7067269

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

Sample #s: 7067263

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

Sample #s: 7067260, 7067261, 7067262, 7067267, 7067268

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.

**SW-846 6010B, Metals**

Batch #: 131431848001 (Sample number(s): 7067256-7067269 UNSPK: 7067265 BKG: 7067265)

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

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



Sample Description: WS-003 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067256  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:10 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

3SR-- SDG#: PEH74-01

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) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067256  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:10 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

3SR-- SDG#: PEH74-01

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	16.9	0.064	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	0.0197	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-003 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067256  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:10 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

3SR-- SDG#: PEH74-01

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>	
01750	Calcium	7440-70-2	3.81	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.79	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0012 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/23/2013 22:58	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/23/2013 22:58	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 05:39	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:21	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:08	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-002 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067257  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:40 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

2SR-- SDG#: PEH74-02

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-002 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067257  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:40 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

2SR-- SDG#: PEH74-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<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 Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	15.9	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0193	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-002 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067257  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 08:40 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

2SR-- SDG#: PEH74-02

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>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
01750	Calcium	7440-70-2	3.56	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.71	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 00:05	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 00:05	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 06:07	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:31	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:20	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: **WS-BKG-002 (Surface) 052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067258**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 08:50 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

B2SR- SDG#: PEH74-03

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-BKG-002 (Surface) 052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067258**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 08:50 by JO ExxonMobil  
 Submitted: 05/23/2013 09:20 Mobil Pipeline Company  
 Reported: 05/28/2013 20:52 PO Box 4416  
 Houston TX 77210-4416

B2SR- SDG#: PEH74-03

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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	18.5	0.064	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	0.0378	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: **WS-BKG-002(Surface)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067258**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 08:50 by JO ExxonMobil  
 Submitted: 05/23/2013 09:20 Mobil Pipeline Company  
 Reported: 05/28/2013 20:52 PO Box 4416  
 Houston TX 77210-4416

B2SR- SDG#: PEH74-03

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	4.65	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.66	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0029 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0030 J	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/23/2013 22:12	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/23/2013 22:12	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 06:36	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:35	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:22	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-005 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067259  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 09:10 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

5SR-- SDG#: PEH74-04

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

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

Sample Description: WS-005 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067259  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 09:10 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

5SR-- SDG#: PEH74-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL</b>						
			ug/l	ug/l	ug/l	
	<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 Semivolatiles SW-846 8270C SIM</b>						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals SM 2340 B-1997</b>						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.8	0.064	0.20	1
<b>SW-846 6010B</b>						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0153	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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



Sample Description: WS-005 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067259  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 09:10 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

5SR-- SDG#: PEH74-04

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	3.83	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.75	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0011 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 00:28	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 00:28	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 07:05	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:24	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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



Sample Description: WS-008 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067260  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 09:30 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

8SR-- SDG#: PEH74-05

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

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

Sample Description: **WS-008 (Surface) 052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067260**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 09:30 by JO ExxonMobil  
 Mobil Pipeline Company  
 Submitted: 05/23/2013 09:20 PO Box 4416  
 Reported: 05/28/2013 20:52 Houston TX 77210-4416

8SR-- SDG#: PEH74-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL 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	0.1 J	0.1	0.5	1
<b>GC/MS Semivolatiles SW-846 8270C SIM</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	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.011 J	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.

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l
06256	Total Hardness as CaCO3	471-34-1	23.8	0.064

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

Sample Description: WS-008 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067260  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 09:30 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

8SR-- SDG#: PEH74-05

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	0.0848	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.36	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0122 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0073 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.13	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0131	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0181	0.0013	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.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 00:50	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 00:50	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 07:33	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:42	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-001(Surface)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067261  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:00 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

1SR-- SDG#: PEH74-06

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

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

Sample Description: **WS-001(Surface)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067261**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 10:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

1SR-- SDG#: PEH74-06

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.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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	17.6	0.064	0.20	1

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

Sample Description: WS-001(Surface)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067261  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:00 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

1SR-- SDG#: PEH74-06

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>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0351	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.86	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0025 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.94	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0028 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0038 J	0.0013	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.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 01:13	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 01:13	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 08:02	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:45	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067262  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:10 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

105-- SDG#: PEH74-07

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

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



Sample Description: **WS-001(0.5-1.0)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067262**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 10:10 by JO

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

Submitted: 05/23/2013 09:20

Reported: 05/28/2013 20:52

105-- SDG#: PEH74-07

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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	17.5	0.064	0.20	1

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



Sample Description: WS-001(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067262  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:10 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

105-- SDG#: PEH74-07

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>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0338	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.88	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.90	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0024 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0031 J	0.0013	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.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 01:35	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 01:35	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 08:31	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:49	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-004(Surface)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067263  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:20 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

4SR-- SDG#: PEH74-08

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

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

Sample Description: **WS-004(Surface)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067263**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 10:20 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

4SR-- SDG#: PEH74-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B 25mL 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 Semivolatiles SW-846 8270C SIM</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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals SM 2340 B-1997</b>						
06256	Total Hardness as CaCO3	471-34-1	29.7	0.064	0.20	1
<b>SW-846 6010B</b>						
07035	Arsenic	7440-38-2	0.0091 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.163	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-004(Surface)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067263  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:20 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

4SR-- SDG#: PEH74-08

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	6.25	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0194	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0155	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.42	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0147	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0291	0.0013	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	0.000081 J	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 01:58	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 01:58	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 08:59	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:52	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:32	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-004(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067264  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:30 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

405-- SDG#: PEH74-09

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

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

Sample Description: **WS-004(0.5-1.0)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067264**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 10:30 by JO ExxonMobil  
 Submitted: 05/23/2013 09:20 Mobil Pipeline Company  
 Reported: 05/28/2013 20:52 PO Box 4416  
 Houston TX 77210-4416

405-- SDG#: PEH74-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles 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 Semivolatiles 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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
<b>Metals 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	30.2	0.064	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	0.0098 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.177	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-004(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067264  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:30 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

405-- SDG#: PEH74-09

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	6.38	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0178	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0162	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.46	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0143	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0275	0.0013	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	0.000095 J	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 02:20	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 02:20	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 09:28	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:56	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:34	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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



Sample Description: WS-007 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067265  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:40 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

7SR-- SDG#: PEH74-10

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

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



Sample Description: WS-007 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067265  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:40 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

7SR-- SDG#: PEH74-10

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	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	0.013 J	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	0.035 J	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	0.013 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.069	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	0.068	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.059	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	36.4	0.064	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	0.0112 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.227	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-007 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067265  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:40 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

7SR-- SDG#: PEH74-10

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	7.15	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0250	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0175	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.51	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0177	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0361	0.0013	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	0.00011 J	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 02:42	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 02:42	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 09:57	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 17:57	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:36	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067266  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:50 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

705-- SDG#: PEH74-11

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

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

Sample Description: **WS-007(0.5-1.0)052213 Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067266**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013 10:50 by JO ExxonMobil  
 Submitted: 05/23/2013 09:20 Mobil Pipeline Company  
 Reported: 05/28/2013 20:52 PO Box 4416  
 Houston TX 77210-4416

705-- SDG#: PEH74-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles 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 Semivolatiles 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	0.027 J	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	0.023 J	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	0.038 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.033 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 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	39.6	0.064	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	0.0130 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.254	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-007(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067266  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:50 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

705-- SDG#: PEH74-11

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	7.32	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0310	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0227	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.19	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0235	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0452	0.0013	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	0.000096 J	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 03:05	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 03:05	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 10:25	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 18:59	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:42	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: WS-006 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067267  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:55 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

6SR-- SDG#: PEH74-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	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-006 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067267  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:55 by JO

ExxonMobil

Mobil Pipeline Company

Submitted: 05/23/2013 09:20

PO Box 4416

Reported: 05/28/2013 20:52

Houston TX 77210-4416

6SR-- SDG#: PEH74-12

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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	17.9	0.064	0.20	1

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



Sample Description: WS-006 (Surface) 052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067267  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 10:55 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

6SR-- SDG#: PEH74-12

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	0.0184 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0241	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00055 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.10	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0033 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.86	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0016 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0032 J	0.0013	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.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 03:27	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 03:27	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 10:54	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 19:03	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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



Sample Description: WS-006(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067268  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 11:00 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

605-- SDG#: PEH74-13

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-006(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067268  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 11:00 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

605-- SDG#: PEH74-13

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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	17.5	0.064	0.20	1

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

Sample Description: WS-006(0.5-1.0)052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067268  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 11:00 by JO ExxonMobil  
Mobil Pipeline Company  
Submitted: 05/23/2013 09:20 PO Box 4416  
Reported: 05/28/2013 20:52 Houston TX 77210-4416

605-- SDG#: PEH74-13

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	0.0278	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.93	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.86	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0016 J	0.0013	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.	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 03:50	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 03:50	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 11:23	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 19:13	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: DUP-WS-29-052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067269  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

FD29- SDG#: PEH74-14FD

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: DUP-WS-29-052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067269  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

FD29- SDG#: PEH74-14FD

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	0.1 J	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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	22.6	0.064	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	0.0593	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: DUP-WS-29-052213 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067269  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013 by JO

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

FD29- SDG#: PEH74-14FD

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	4.43	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0059 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0057 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0101	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0081	0.0013	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	0.000075 J	0.000070	0.00020	1

### General Sample Comments

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131432AA	05/24/2013 04:12	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/24/2013 04:12	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13143WAE026	05/24/2013 11:51	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13143WAE026	05/23/2013 18:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131436256001	05/23/2013 21:31	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131431848001	05/23/2013 19:17	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131435713002	05/24/2013 08:49	Damary Valentini	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131431848001	05/23/2013 12:40	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131435713002	05/23/2013 14:50	Nelli S Markaryan	1

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

Sample Description: **WS-TB-50-052213 Water**  
**Mayflower, AR**  
**Pipeline Incident**

LLI Sample # **WW 7067270**  
 LLI Group # **1391967**  
 Account # **14739**

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

Collected: 05/22/2013

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

TB50- SDG#: PEH74-15TB\*

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-50-052213 Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7067270  
LLI Group # 1391967  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/22/2013

ExxonMobil

Submitted: 05/23/2013 09:20

Mobil Pipeline Company

Reported: 05/28/2013 20:52

PO Box 4416

Houston TX 77210-4416

TB50- SDG#: PEH74-15TB\*

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	C131432AA	05/23/2013 22:34	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131432AA	05/23/2013 22:34	Kevin A Sposito	1

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



## Quality Control Summary

Client Name: ExxonMobil  
Reported: 05/28/13 at 08:52 PM

Group Number: 1391967

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: C131432AA	Sample number(s): 7067256-7067270								
Acetone	N.D.	3.0	5.0	ug/l	100		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	95		61-130		
Benzene	N.D.	0.1	0.5	ug/l	102		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	109		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	102		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	107		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	92		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	99		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	105		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	90		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	103		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	74		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	101		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	104		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	107		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	101		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	53		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	104		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	106		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	95		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	100		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	94		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	86		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	95		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	104		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	95		61-125		

\*- Outside of specification

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

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

## Quality Control Summary

Client Name: ExxonMobil

Group Number: 1391967

Reported: 05/28/13 at 08:52 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>LCS D %REC</u>	<u>LCS/LCS D Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	97		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	99		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	107		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Styrene	N.D.	0.1	0.5	ug/l	106		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	101		65-131		
Toluene	N.D.	0.1	0.5	ug/l	101		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	90		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	90		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	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	103		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	93		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	98		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	82		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	103		80-120		

Batch number: 13143WAE026

Sample number(s): 7067256-7067269

Acenaphthene	N.D.	0.010	0.050	ug/l	100	101	65-124	0	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	103	103	72-113	0	30
Anthracene	N.D.	0.010	0.050	ug/l	104	104	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	105	104	75-115	0	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	103	102	72-120	1	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	115	115	74-130	0	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	107	103	63-121	4	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	110	110	74-118	0	30
Chrysene	N.D.	0.010	0.050	ug/l	107	105	75-112	1	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	104	97	66-122	7	30
Fluoranthene	N.D.	0.010	0.050	ug/l	104	105	73-116	1	30
Fluorene	N.D.	0.010	0.050	ug/l	102	103	74-115	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	106	100	66-122	5	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107	106	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105	103	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	101	99	67-118	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	101	102	72-109	1	30
Pyrene	N.D.	0.010	0.050	ug/l	104	102	71-116	2	30

Batch number: 131431848001

Sample number(s): 7067256-7067269

Arsenic	N.D.	0.0068	0.0200	mg/l	95		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	99		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	97		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	99		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	98		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	101		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	96		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	102		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	96		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	91		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	100		90-110		

\*- Outside of specification

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

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

## Quality Control Summary

Client Name: ExxonMobil

Group Number: 1391967

Reported: 05/28/13 at 08:52 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 131435713002	Sample number(s): 7067256-7067269								
Mercury	N.D.	0.00007	0.00020	mg/l	99		80-120		
		0							

## Sample Matrix Quality Control

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

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: C131432AA	Sample number(s): 7067256-7067270 UNSPK: 7067258								
Acetone	117	103	57-163	13	30				
Allyl Chloride	101	108	67-139	7	30				
Benzene	107	111	87-126	4	30				
Bromobenzene	102	108	80-123	6	30				
Bromochloromethane	111	114	82-125	3	30				
Bromodichloromethane	106	108	82-133	2	30				
Bromoform	108	110	60-138	2	30				
Bromomethane	94	98	41-145	4	30				
2-Butanone	102	100	63-146	3	30				
n-Butylbenzene	109	111	83-131	2	30				
sec-Butylbenzene	109	113	84-128	4	30				
tert-Butylbenzene	110	115	84-135	4	30				
Carbon Tetrachloride	118	119	81-148	1	30				
Chlorobenzene	110	114	78-133	3	30				
Chloroethane	96	101	70-139	6	30				
Chloroform	109	112	86-136	3	30				
Chloromethane	76	82	55-152	7	30				
2-Chlorotoluene	107	111	81-120	4	30				
4-Chlorotoluene	109	113	82-119	4	30				
1,2-Dibromo-3-chloropropane	108	108	43-143	1	30				
Dibromochloromethane	109	111	79-125	1	30				
1,2-Dibromoethane	102	107	84-127	5	30				
Dibromomethane	104	108	83-126	4	30				
1,2-Dichlorobenzene	104	109	83-117	4	30				
1,3-Dichlorobenzene	108	111	81-118	3	30				
1,4-Dichlorobenzene	106	110	79-120	4	30				
Dichlorodifluoromethane	54	53	28-136	0	30				
1,1-Dichloroethane	109	110	88-136	1	30				
1,2-Dichloroethane	104	107	82-135	3	30				
1,1-Dichloroethene	116	120	83-150	4	30				
cis-1,2-Dichloroethene	108	113	82-129	4	30				
trans-1,2-Dichloroethene	112	115	88-127	3	30				
Dichlorofluoromethane	117	122	59-176	4	30				
1,2-Dichloropropane	109	114	91-126	4	30				
1,3-Dichloropropane	102	106	80-127	4	30				
2,2-Dichloropropane	105	109	80-134	3	30				
1,1-Dichloropropene	112	116	86-139	4	30				
cis-1,3-Dichloropropene	97	104	74-132	7	30				
trans-1,3-Dichloropropene	89	93	71-128	4	30				
Ethyl ether	94	95	67-127	1	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: 05/28/13 at 08:52 PM

Group Number: 1391967

### 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>BKG</u> <u>MAX</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Ethylbenzene	110	113	80-140	3	30			
Freon 113	117	114	87-158	3	30			
Hexachlorobutadiene	107	109	65-128	2	30			
Isopropylbenzene	111	114	81-133	3	30			
p-Isopropyltoluene	110	113	84-124	3	30			
Methyl Tertiary Butyl Ether	96	100	82-132	4	30			
4-Methyl-2-Pentanone	96	99	69-149	3	30			
Methylene Chloride	108	112	84-122	4	30			
n-Propylbenzene	106	111	79-131	4	30			
Styrene	110	115	63-151	4	30			
1,1,1,2-Tetrachloroethane	108	113	87-126	4	30			
1,1,2,2-Tetrachloroethane	100	101	75-131	1	30			
Tetrachloroethene	112	116	75-129	3	30			
Tetrahydrofuran	105	101	56-154	3	30			
Toluene	108	113	83-127	5	30			
1,2,3-Trichlorobenzene	95	99	73-125	4	30			
1,2,4-Trichlorobenzene	97	101	77-120	4	30			
1,1,1-Trichloroethane	111	114	85-140	3	30			
1,1,2-Trichloroethane	104	106	85-129	2	30			
Trichloroethene	112	116	85-131	4	30			
Trichlorofluoromethane	99	99	67-161	1	30			
1,2,3-Trichloropropane	99	100	76-120	1	30			
1,2,4-Trimethylbenzene	107	111	87-126	4	30			
1,3,5-Trimethylbenzene	107	112	89-129	5	30			
Vinyl Chloride	88	90	65-151	3	30			
Xylene (Total)	110	114	81-137	3	30			

Batch number: 131431848001	Sample number(s): 7067256-7067269	UNSPK: 7067265	BKG: 7067265					
Arsenic	101	101	81-123	1	20	0.0112 J	0.0196 J	54* (1) 20
Barium	101	101	78-118	0	20	0.227	0.270	17 20
Cadmium	96	95	83-116	1	20	N.D.	N.D.	0 (1) 20
Calcium	101	106	81-118	2	20	7.15	7.62	6 20
Chromium	112	111	81-120	1	20	0.0250	0.0365	37* (1) 20
Lead	106	106	75-125	0	20	0.0175	0.0282	47* (1) 20
Magnesium	212*	218*	75-125	2	20	4.51	5.93	27* 20
Nickel	103	103	86-115	0	20	0.0177	0.0290	49* (1) 20
Selenium	96	93	75-125	3	20	N.D.	N.D.	0 (1) 20
Silver	91	89	75-125	2	20	N.D.	N.D.	0 (1) 20
Vanadium	108	106	90-111	2	20	0.0361	0.0534	38* 20

Batch number: 131435713002	Sample number(s): 7067256-7067269	UNSPK: 7067256	BKG: 7067256					
Mercury	97	97	80-120	0	20	N.D.	N.D.	0 (1) 20

### Surrogate Quality Control

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

Analysis Name: NHDES VOCs 25ml purge

\*- 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: 05/28/13 at 08:52 PM

Group Number: 1391967

### Surrogate Quality Control

Batch number: C131432AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7067256	104	103	99	95
7067257	103	101	99	98
7067258	104	104	99	96
7067259	104	103	99	96
7067260	104	102	99	97
7067261	104	101	99	96
7067262	104	103	98	96
7067263	104	103	99	95
7067264	104	103	99	97
7067265	104	100	99	95
7067266	104	102	99	97
7067267	104	104	98	96
7067268	104	101	99	96
7067269	105	106	98	96
7067270	104	101	99	96
Blank	105	103	99	96
LCS	103	103	101	99
MS	102	101	100	99
MSD	102	100	101	100
<hr/>				
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13143WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7067256	96	68	92
7067257	98	69	96
7067258	81	75	86
7067259	97	75	102
7067260	71	59*	79
7067261	77	45*	79
7067262	75	48*	87
7067263	52*	31*	56*
7067264	39*	18*	57*
7067265	43*	23*	54*
7067266	41*	22*	49*
7067267	99	59*	90
7067268	79	60*	91
7067269	53*	38*	56*
Blank	96	103	90
LCS	98	105	104
LCSD	101	107	104
<hr/>			
Limits:	64-120	62-141	58-134

\*- Outside of specification

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

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

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 14739

For Eurofins Lancaster Laboratories use only  
 Group # 1391967 Sample # 7067256-270  
 Instructions on reverse side correspond with circled numbers.

Pg. 1 of 2

<b>1 Client Information</b>				<b>4 Matrix</b>				<b>5 Analyses Requested</b>												<b>SCR#:</b> _____																																																																																																																																																																																																																																																																																																																																				
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Site Address <u>Mayflower, AR</u>								<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">H</td> <td style="width: 20px; text-align: center;">N</td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>														H	N																					X	X																																																																																																																																																																																																																																																																																																											
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Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-502-6799</u>																																																																																																																																																																																																																																																																																																																																																						
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<b>2 Sample Identification</b>				<b>3 Grab Composite</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> <th rowspan="2">Soil</th> <th rowspan="2">Water</th> <th rowspan="2">Oil</th> <th rowspan="2">Total # of Containers</th> <th rowspan="2">VOC</th> <th rowspan="2">PAH</th> <th rowspan="2">RCRA Metals</th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> <tr> <td><u>WS-003 (surface)</u></td> <td><u>052213</u></td> <td><u>5/22/13</u></td> <td><u>0810</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-002 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>0840</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-BK6-002 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>0850</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-005 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>0910</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-008 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>0930</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-001 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>1000</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-001 (0.5-1.0)</u></td> <td><u>052213</u></td> <td></td> <td><u>1010</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-004 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>1020</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-004 (0.5-1.0)</u></td> <td><u>052213</u></td> <td></td> <td><u>1030</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-007 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>1040</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-007 (0.5-1.0)</u></td> <td><u>052213</u></td> <td></td> <td><u>1050</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WS-006 (surface)</u></td> <td><u>052213</u></td> <td></td> <td><u>1055</u></td> <td></td> <td></td> <td></td> <td><u>6</u></td> <td><u>X</u></td> <td><u>X</u></td> <td><u>X</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>												Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers	VOC	PAH	RCRA Metals															Date	Time	<u>WS-003 (surface)</u>	<u>052213</u>	<u>5/22/13</u>	<u>0810</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-002 (surface)</u>	<u>052213</u>		<u>0840</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-BK6-002 (surface)</u>	<u>052213</u>		<u>0850</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-005 (surface)</u>	<u>052213</u>		<u>0910</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-008 (surface)</u>	<u>052213</u>		<u>0930</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-001 (surface)</u>	<u>052213</u>		<u>1000</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-001 (0.5-1.0)</u>	<u>052213</u>		<u>1010</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-004 (surface)</u>	<u>052213</u>		<u>1020</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-004 (0.5-1.0)</u>	<u>052213</u>		<u>1030</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-007 (surface)</u>	<u>052213</u>		<u>1040</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-007 (0.5-1.0)</u>	<u>052213</u>		<u>1050</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>															<u>WS-006 (surface)</u>	<u>052213</u>		<u>1055</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>														
Collected		Grab	Composite	Soil	Water													Oil	Total # of Containers																								VOC	PAH	RCRA Metals																																																																																																																																																																																																																																																																																																											
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<u>WS-006 (surface)</u>	<u>052213</u>		<u>1055</u>				<u>6</u>	<u>X</u>	<u>X</u>	<u>X</u>																																																																																																																																																																																																																																																																																																																																														
<b>7 Turnaround Time Requested (TAT) (please circle)</b>				Relinquished by <u>[Signature]</u>				Date <u>5/22/13</u>		Time <u>1800</u>		Received by		Date		Time		<b>9</b>																																																																																																																																																																																																																																																																																																																																						
Standard      5 day      4 day				Relinquished by				Date		Time		Received by		Date		Time																																																																																																																																																																																																																																																																																																																																								
12 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				Date		Time		Received by		Date		Time																																																																																																																																																																																																																																																																																																																																								
Type I - Full		Type VI (Raw Data)		NJ Reduced		Other _____		UPS _____		<input checked="" type="checkbox"/> FedEx		Other _____		<u>[Signature]</u>		<u>5/23/13</u>		<u>0920</u>																																																																																																																																																																																																																																																																																																																																						
EDD (circle if required) Locus EIM (default) Other _____				Temperature Upon Receipt <u>1.0-2.3 °C</u>				Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																																																																																																																																																																																																																																																																																																																

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 14739      For Eurofins Lancaster Laboratories use only      Group # 1391967      Sample # 7067256-270  
Instructions on reverse side correspond with circled numbers.

Pg. 2 of 2

1 Client Information			4 Matrix			5 Analyses Requested						6 Preservation Codes				
Facility #/SID <u>Mayflower Pipeline Incident</u>			<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Water <input type="checkbox"/> Soil <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> NPDES <input type="checkbox"/> Air	Preservation Code						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>				Total # of Containers								(6) Remarks <u>Data Analysis questions                  Lyndi Mott                  ARCADES</u>				
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		VOC 8260 B												
Consultant/Office <u>ARCADES US</u>				PAH 8270 SEM												
Consultant PM <u>Steve Barwick</u>		Consultant Phone # <u>919-302-6799</u>		PCRA Metals - <u>As, Ni, Ni, Ni, Ni, Ni, Ni, Ni</u>												
Sampler <u>Joshua Oliver / Hays VanAlst</u>		315-859-5793	(3) Grab Composite													
2 Sample Identification			Collected		Soil		Water				Oil		Total # of Containers			
		Date	Time	Grab	Composite											
<u>WS-006 (05-10)052213</u>		<u>5/22/13</u>	<u>1100</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
<u>DWP-WS-29-052213</u>		<u>5/22/13</u>	<u>---</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
<u>WS-TB-50-052213</u>		<u>5/22/13</u>	<u>---</u>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
(7) Turnaround Time Requested (TAT) (please circle) Standard      5 day      4 day <u>72 hour</u> 48 hour      24 hour			Relinquished by <u>[Signature]</u>		Date <u>5/22/13</u>	Time <u>1400</u>	Received by <u>[Signature]</u>		Date <u>5/23/13</u>	Time <u>0920</u>	(9)					
			Relinquished by		Date	Time	Received by		Date	Time						
			Relinquished by		Date	Time	Received by		Date	Time						
			Relinquished by Commercial Carrier		UPS _____      FedEx _____      Other _____		Received by <u>[Signature]</u>		Date <u>5/23/13</u>	Time <u>0920</u>						
(8) Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____			EDD (circle if required) Locus EIM (default) Other _____			Temperature Upon Receipt <u>1.0-2.3</u> °C			Custody Seals Intact? <u>Yes</u> No							



Environmental Sample Administration  
Receipt Documentation Log

Client/Project: XOM Mayflower

Shipping Container Sealed: YES NO

Date of Receipt: 5/23/13

Custody Seal Present \* : YES NO

Time of Receipt: 0920

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

Source Code: 50-1

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.0	TB	WI	Y	B	
2	↓	2.3	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Unpacker Signature/Emp#: Wafeski / 208 Date/Time: 5/23/13 0940

# 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>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>J</b>	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers	Inorganic Qualifiers
<b>A</b> TIC is a possible aldol-condensation product	<b>B</b> Value is $<$ CRDL, but $\geq$ IDL
<b>B</b> Analyte was also detected in the blank	<b>E</b> Estimated due to interference
<b>C</b> Pesticide result confirmed by GC/MS	<b>M</b> Duplicate injection precision not met
<b>D</b> Compound quantitated on a diluted sample	<b>N</b> Spike sample not within control limits
<b>E</b> Concentration exceeds the calibration range of the instrument	<b>S</b> Method of standard additions (MSA) used for calculation
<b>N</b> Presumptive evidence of a compound (TICs only)	<b>U</b> Compound was not detected
<b>P</b> Concentration difference between primary and confirmation columns $>$ 25%	<b>W</b> Post digestion spike out of control limits
<b>U</b> Compound was not detected	<b>*</b> Duplicate analysis not within control limits
<b>X,Y,Z</b> Defined in case narrative	<b>+</b> 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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