

ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

June 21, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/14/2013

Group Number: 1397137

SDG: PEI21

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(Surface)061313 Grab Surface Water	7092898
WS-002(Surface)061313 Grab Surface Water	7092899
WS-005(Surface)061313 Grab Surface Water	7092900
WS-008(Surface)061313 Grab Surface Water	7092901
WS-007(Surface)061313 Grab Surface Water	7092902
WS-007(0.5-1.0)061313 Grab Surface Water	7092903
WS-006(Surface)061313 Grab Surface Water	7092904
WS-006(0.5-1.0)061313 Grab Surface Water	7092905
WS-001(Surface)061313 Grab Surface Water	7092906
WS-001(0.5-1.0)061313 Grab Surface Water	7092907
WS-004(Surface)061313 Grab Surface Water	7092908
WS-004(0.5-1.0)061313 Grab Surface Water	7092909
DUP-WS-40-061313 Grab Surface Water	7092910
WS-TB-72-061313 Water	7092911

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

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Attn: Lyndi Mott

ELECTRONIC ExxonMobil

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Attn: Michael J. Firth

ELECTRONIC ARCADIS

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Attn: Emily Leamer

ELECTRONIC ARCADIS

Attn: Rhiannon Parmalee

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ELECTRONIC	ARCADIS	Attn: Jamie Pritchard
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ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
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ELECTRONIC	ExxonMobil	Attn: Julie Foster
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ELECTRONIC	ExxonMobil	Attn: Carl Wideman
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Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1397137

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 8260B 25mL purge, GC/MS Volatiles**

Batch #: C131681AA (Sample number(s): 7092898-7092911 UNSPK: 7092898)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,3,5-Trimethylbenzene

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13165WAJ026 (Sample number(s): 7092898-7092910)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7092898, 7092907, 7092909

Sample #s: 7092898, 7092907, 7092909

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 #: 131661848002 (Sample number(s): 7092898-7092910 UNSPK: 7092904 BKG: 7092904)

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

Sample Description: WS-003(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092898
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 07:30 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13003 SDG#: PEI21-01

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)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092898
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 07:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13003 SDG#: PEI21-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.1 J	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
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	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	19.5	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0181	0.00033	0.0050	1

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

Sample Description: WS-003(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092898
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 07:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13003 SDG#: PEI21-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	0.00036 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.36	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	2.10	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 11:37	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 11:37	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 12:40	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:34	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-002(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092899
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13002 SDG#: PEI21-02

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)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092899
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13002 SDG#: PEI21-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO ₃	471-34-1	18.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0159	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.20	0.0640	0.200	1

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

Sample Description: WS-002(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092899
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13002 SDG#: PEI21-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.00	0.0606	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 12:00	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 12:00	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 13:09	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:38	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-005(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092900
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13005 SDG#: PEI21-03

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

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

Sample Description: WS-005(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092900
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13005 SDG#: PEI21-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.15	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	21.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0210	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00038 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.98	0.0640	0.200	1

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

Sample Description: WS-005(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092900
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 08:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13005 SDG#: PEI21-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.08	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
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 12:22	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 12:22	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 13:38	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:49	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-008(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092901
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 09:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13008 SDG#: PEI21-04

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	6.5	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	0.1 J	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)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092901
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 09:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13008 SDG#: PEI21-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.021 J	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	0.011 J	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	0.011 J	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.024 J	0.011	0.053	1
08357	Fluorene	86-73-7	0.011 J	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.085	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.018 J	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	60.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0470	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	14.4	0.0640	0.200	1

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

Sample Description: WS-008(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092901
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 09:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13008 SDG#: PEI21-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.06	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0033 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	0.0019 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 12:44	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 12:44	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 14:07	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:53	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-007(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092902
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13071 SDG#: PEI21-05

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

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

Sample Description: WS-007(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092902
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13071 SDG#: PEI21-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	0.012 J	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.011 J	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.023 J	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.015 J	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.013 J	0.011	0.053	1
08357	Chrysene	218-01-9	0.030 J	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.033 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	0.013 J	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.014 J	0.011	0.053	1
08357	Naphthalene	91-20-3	0.064	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.030 J	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.4	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0446	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00041 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.84	0.0640	0.200	1

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

Sample Description: WS-007(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092902
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13071 SDG#: PEI21-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0030 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.88	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0025 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	0.0044 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 13:06	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 13:06	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 14:35	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:57	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092903
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13072 SDG#: PEI21-06

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

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

Sample Description: WS-007(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092903
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:10 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13072 SDG#: PEI21-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	1.9	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.046 J	0.010	0.052	1
08357	Acenaphthylene	208-96-8	0.095	0.010	0.052	1
08357	Anthracene	120-12-7	0.21	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.53	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.46	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	1.7	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.39	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.49	0.010	0.052	1
08357	Chrysene	218-01-9	1.3	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.11	0.010	0.052	1
08357	Fluoranthene	206-44-0	2.5	0.010	0.052	1
08357	Fluorene	86-73-7	0.044 J	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.54	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.020 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.030 J	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	0.53	0.031	0.052	1
08357	Pyrene	129-00-0	2.1	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0100 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.127	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00073 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.88	0.0640	0.200	1

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

Sample Description: WS-007(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092903
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13072 SDG#: PEI21-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0138 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0231	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.38	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0106	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	0.0213	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 13:28	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 13:28	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 15:04	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:02	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-006(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092904
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:20 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13061 SDG#: PEI21-07

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-006(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092904
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:20 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13061 SDG#: PEI21-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.015 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.011 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	0.013 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	0.053	0.010	0.051	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	20.6	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0253	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.68	0.0640	0.200	1

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

Sample Description: WS-006(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092904
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13061 SDG#: PEI21-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.17	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0014 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 13:50	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 13:50	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 15:33	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 07:09	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092905
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:30 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13062 SDG#: PEI21-08

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-006(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092905
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:30 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13062 SDG#: PEI21-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	19.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0211	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00036 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.42	0.0640	0.200	1

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

Sample Description: WS-006(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092905
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13062 SDG#: PEI21-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.07	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
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 14:12	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 14:12	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 16:01	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:05	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-001(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092906
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:50 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13011 SDG#: PEI21-09

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

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

Sample Description: WS-001(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092906
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13011 SDG#: PEI21-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	21.0	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0230	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00041 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.91	0.0640	0.200	1

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

Sample Description: WS-001(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092906
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 10:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13011 SDG#: PEI21-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.12	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0014 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 14:34	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 14:34	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 16:30	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:09	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092907
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:00 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13012 SDG#: PEI21-10

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-001(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092907
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:00 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13012 SDG#: PEI21-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	20.8	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0341	0.00033	0.0050	1

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

Sample Description: WS-001(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092907
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13012 SDG#: PEI21-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	0.00036 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.65	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0026 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.23	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0021 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	0.0026 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 14:56	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 14:56	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 16:59	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:13	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-004(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092908
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13041 SDG#: PEI21-11

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

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

Sample Description: WS-004(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092908
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13041 SDG#: PEI21-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	15.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0224	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.70	0.0640	0.200	1

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

Sample Description: WS-004(Surface)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092908
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13041 SDG#: PEI21-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0019 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.55	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 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	0.0025 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 15:19	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 15:19	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 17:28	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:17	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092909
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:20 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13042 SDG#: PEI21-12

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	3.4 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	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)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092909
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:20 by TM

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13042 SDG#: PEI21-12

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	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	1.7	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.018 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	0.013 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	0.016 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	0.015 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.017 J	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	0.014 J	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.9	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0429	0.00033	0.0050	1

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

Sample Description: WS-004(0.5-1.0)061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092909
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 11:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13042 SDG#: PEI21-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	0.00040 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.91	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0042 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0071 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.72	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0039 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	0.0056	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 16:25	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 16:25	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 17:57	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:22	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: DUP-WS-40-061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092910
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 by SB

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13D40 SDG#: PEI21-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	7.2	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	0.2 J	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-40-061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092910
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 by SB

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13D40 SDG#: PEI21-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.020 J	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	0.011 J	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	0.012 J	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.025 J	0.011	0.053	1
08357	Fluorene	86-73-7	0.014 J	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.080	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.019 J	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	61.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0463	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00045 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	14.5	0.0640	0.200	1

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

Sample Description: DUP-WS-40-061313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092910
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013 by SB

ExxonMobil

Mobil Pipeline Company

Submitted: 06/14/2013 09:25

PO Box 4416

Reported: 06/21/2013 11:24

Houston TX 77210-4416

13D40 SDG#: PEI21-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.02	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0036 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
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131681AA	06/17/2013 16:47	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 16:47	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13165WAJ026	06/17/2013 18:25	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13165WAJ026	06/15/2013 17:15	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131726256001	06/21/2013 08:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131661848002	06/18/2013 08:25	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131655713001	06/16/2013 08:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131661848002	06/17/2013 10:17	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131655713001	06/15/2013 09:40	Damary Valentin	1

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

Sample Description: WS-TB-72-061313 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092911
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13T72 SDG#: PEI21-14TB*

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

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

Sample Description: WS-TB-72-061313 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7092911
LLI Group # 1397137
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/13/2013

ExxonMobil

Submitted: 06/14/2013 09:25

Mobil Pipeline Company

Reported: 06/21/2013 11:24

PO Box 4416

Houston TX 77210-4416

13T72 SDG#: PEI21-14TB*

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	C131681AA	06/17/2013 10:30	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131681AA	06/17/2013 10:30	Kerri E Legerlotz	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 06/21/13 at 11:24 AM

Group Number: 1397137

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: C131681AA	Sample number(s): 7092898-7092911								
Acetone	N.D.	3.0	5.0	ug/l	121		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	94		61-130		
Benzene	N.D.	0.1	0.5	ug/l	105		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	113		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	109		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	123		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	94		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	118		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	117		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	111		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	93		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	108		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	81		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	105		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	130		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	119		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	109		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	107		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	73		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	107		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	116		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	113		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	117		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	109		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	103		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	104		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	111		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	106		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	106		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	97		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	113		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	99		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: 1397137

Reported: 06/21/13 at 11:24 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	103		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	99		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	97		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	110		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Styrene	N.D.	0.1	0.5	ug/l	110		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	110		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	99		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	112		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	125		65-131		
Toluene	N.D.	0.1	0.5	ug/l	106		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	83		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	89		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	108		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	110		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	112		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	98		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	101		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	86		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	107		80-120		

Batch number: 13165WAJ026

Sample number(s): 7092898-7092910

Acenaphthene	N.D.	0.010	0.050	ug/l	86	80	65-124	8	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	89	82	72-113	8	30
Anthracene	N.D.	0.010	0.050	ug/l	96	89	70-117	7	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	101	94	75-115	7	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	93	85	72-120	9	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	104	97	74-130	7	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	87	80	63-121	8	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	97	91	74-118	7	30
Chrysene	N.D.	0.010	0.050	ug/l	93	87	75-112	7	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	87	79	66-122	9	30
Fluoranthene	N.D.	0.010	0.050	ug/l	95	88	73-116	7	30
Fluorene	N.D.	0.010	0.050	ug/l	87	81	74-115	8	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	88	81	66-122	9	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	96	89	72-114	7	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	94	88	74-119	7	30
Naphthalene	N.D.	0.030	0.050	ug/l	89	83	67-118	7	30
Phenanthrene	N.D.	0.030	0.050	ug/l	90	84	72-109	7	30
Pyrene	N.D.	0.010	0.050	ug/l	93	86	71-116	8	30

Batch number: 131655713001

Sample number(s): 7092898-7092910

Mercury	N.D.	0.00007	0.00020	mg/l	90		80-120		
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Batch number: 131661848002

Sample number(s): 7092898-7092910

Arsenic	N.D.	0.0068	0.0200	mg/l	103		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	102		90-110		
Cadmium	0.00037 J	0.00036	0.0050	mg/l	103		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	100		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	102		88-110		
Magnesium	N.D.	0.0606	0.100	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: 1397137

Reported: 06/21/13 at 11:24 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Nickel	N.D.	0.0011	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	100		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	101		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	100		90-110		

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: C131681AA	Sample number(s): 7092898-7092911 UNSPK: 7092898								
Acetone	126	103	57-163	20	30				
Allyl Chloride	94	89	67-139	6	30				
Benzene	103	92	87-126	12	30				
Bromobenzene	102	90	80-123	13	30				
Bromochloromethane	115	106	82-125	8	30				
Bromodichloromethane	106	92	82-133	14	30				
Bromoform	120	105	60-138	14	30				
Bromomethane	96	95	41-145	1	30				
2-Butanone	114	92	63-146	21	30				
n-Butylbenzene	98	85	83-131	14	30				
sec-Butylbenzene	100	87	84-128	15	30				
tert-Butylbenzene	102	89	84-135	14	30				
Carbon Tetrachloride	114	101	81-148	12	30				
Chlorobenzene	111	95	78-133	15	30				
Chloroethane	95	94	70-139	1	30				
Chloroform	106	93	86-136	13	30				
Chloromethane	85	84	55-152	0	30				
2-Chlorotoluene	102	88	81-120	16	30				
4-Chlorotoluene	104	90	82-119	14	30				
1,2-Dibromo-3-chloropropane	118	98	43-143	19	30				
Dibromochloromethane	115	99	79-125	15	30				
1,2-Dibromoethane	106	97	84-127	9	30				
Dibromomethane	106	94	83-126	11	30				
1,2-Dichlorobenzene	104	91	83-117	14	30				
1,3-Dichlorobenzene	105	90	81-118	15	30				
1,4-Dichlorobenzene	104	91	79-120	13	30				
Dichlorodifluoromethane	72	73	28-136	1	30				
1,1-Dichloroethane	99	88	88-136	12	30				
1,2-Dichloroethane	104	92	82-135	12	30				
1,1-Dichloroethene	111	98	83-150	12	30				
cis-1,2-Dichloroethene	105	92	82-129	13	30				
trans-1,2-Dichloroethene	109	96	88-127	12	30				
Dichlorofluoromethane	123	122	59-176	1	30				
1,2-Dichloropropane	104	92	91-126	12	30				
1,3-Dichloropropane	101	90	80-127	11	30				
2,2-Dichloropropane	103	91	80-134	12	30				
1,1-Dichloropropene	109	95	86-139	13	30				
cis-1,3-Dichloropropene	97	87	74-132	12	30				
trans-1,3-Dichloropropene	100	87	71-128	13	30				
Ethyl ether	96	100	67-127	3	30				

*- Outside of specification

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

(1) The result for one or both determinations was less than five times the LOQ.

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 06/21/13 at 11:24 AM

Group Number: 1397137

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	105	90	80-140	15	30				
Freon 113	112	101	87-158	10	30				
Hexachlorobutadiene	99	86	65-128	14	30				
Isopropylbenzene	104	89	81-133	16	30				
p-Isopropyltoluene	100	87	84-124	15	30				
Methyl Tertiary Butyl Ether	90	87	82-132	4	30				
4-Methyl-2-Pentanone	98	90	69-149	9	30				
Methylene Chloride	105	94	84-122	11	30				
n-Propylbenzene	99	86	79-131	15	30				
Styrene	109	93	63-151	16	30				
1,1,1,2-Tetrachloroethane	110	96	87-126	14	30				
1,1,2,2-Tetrachloroethane	102	90	75-131	12	30				
Tetrachloroethene	112	96	75-129	15	30				
Tetrahydrofuran	112	94	56-154	18	30				
Toluene	105	91	83-127	14	30				
1,2,3-Trichlorobenzene	81	74	73-125	9	30				
1,2,4-Trichlorobenzene	85	77	77-120	10	30				
1,1,1-Trichloroethane	105	93	85-140	12	30				
1,1,2-Trichloroethane	108	96	85-129	11	30				
Trichloroethene	109	95	85-131	13	30				
Trichlorofluoromethane	102	102	67-161	0	30				
1,2,3-Trichloropropane	106	92	76-120	14	30				
1,2,4-Trimethylbenzene	103	90	87-126	13	30				
1,3,5-Trimethylbenzene	101	88*	89-129	14	30				
Vinyl Chloride	91	91	65-151	1	30				
Xylene (Total)	107	92	81-137	15	30				

Batch number: 131655713001 Sample number(s): 7092898-7092910 UNSPK: 7092898 BKG: 7092898
Mercury 91 89 80-120 2 20 N.D. N.D. 0 (1) 20

Batch number: 131661848002 Sample number(s): 7092898-7092910 UNSPK: 7092904 BKG: 7092904
Arsenic 105 105 81-123 1 20 N.D. N.D. 0 (1) 20
Barium 102 102 78-118 0 20 0.0253 0.0258 2 20
Cadmium 103 103 83-116 0 20 N.D. 0.00040 J 200* (1) 20
Calcium 98 101 81-118 1 20 4.68 4.70 1 20
Chromium 102 102 81-120 1 20 N.D. N.D. 0 (1) 20
Lead 102 103 75-125 1 20 N.D. N.D. 0 (1) 20
Magnesium 99 98 75-125 0 20 2.17 2.15 1 20
Nickel 105 104 86-115 0 20 0.0014 J 0.0015 J 7 (1) 20
Selenium 102 101 75-125 2 20 N.D. N.D. 0 (1) 20
Silver 106 103 75-125 3 20 N.D. N.D. 0 (1) 20
Vanadium 102 101 90-111 1 20 N.D. N.D. 0 (1) 20

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge

*- 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: 1397137

Reported: 06/21/13 at 11:24 AM

Surrogate Quality Control

Batch number: C131681AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7092898	108	105	98	96
7092899	107	106	98	95
7092900	108	104	98	95
7092901	107	104	98	94
7092902	108	105	97	94
7092903	109	104	96	94
7092904	109	104	97	92
7092905	109	105	98	94
7092906	109	106	98	94
7092907	109	105	98	95
7092908	111	106	97	95
7092909	108	105	97	94
7092910	108	105	97	94
7092911	106	105	98	95
Blank	107	104	97	94
LCS	105	102	100	98
MS	106	103	101	100
MSD	105	104	100	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13165WAJ026

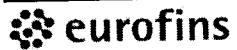
	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7092898	82	41*	91
7092899	96	85	98
7092900	94	79	90
7092901	104	89	110
7092902	94	105	107
7092903	87	81	91
7092904	101	90	103
7092905	92	82	97
7092906	99	81	105
7092907	89	44*	100
7092908	89	87	88
7092909	68	49*	81
7092910	97	72	100
Blank	93	99	100
LCS	96	102	101
LCSD	88	91	93
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.



**Lancaster
Laboratories**

Acct. # 14739

For Lancaster Laboratories use only
Group # 1397137 Sample # 7092898-911
Instructions on reverse side correspond with circled numbers.

pg. 1 of 2

1 Client Information				4 Matrix				5 Analyses Requested				6 Preservation Codes			
Facility #/SID Mayflower Pipeline Incident				☐ Sediment ☐ Potable ☐ Ground ☒ Surface ☐ NPDES ☐ Air ☐ Oil				Preservation Code				SCR#:			
Site Address Mayflower, AR												H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other			
Exxon/Mobil PM Scott Bushroe				Cost Center/AFE				Total # of Containers				Remarks Data Analysis Question. Lyndi Mott/ ARCADIS			
Consultant/Office ARCADIS-US				Consultant Phone # 919-302-6799											
Sampler Tyler Milburn/Hans Van Aller				3											
2 Sample Identification				Collected											
Date				Time				Grab				Composite			
WS-003 (Surface) 061313				6/13/13				0730				X			
WS-002 (Surface) 061313								0800				X			
WS-005 (Surface) 061313								0850				X			
WS-008 (Surface) 061313								0930				X			
WS-007 (Surface) 061313								1000				X			
WS-007 (0.5-1.0) 061313								1010				X			
WS-006 (Surface) 061313								1020				X			
WS-006 (0.5-1.0) 061313								1030				X			
WS-001 (Surface) 061313								1050				X			
WS-001 (0.5-1.0) 061313								1100				X			
WS-004 (Surface) 061313								1110				X			
WS-004 (0.5-1.0) 061313				↓				1120				X			
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by Tyler Mott				Date 6/13/13				Time 1300			
Standard 5 day 4 day				Relinquished by				Date				Time			
72 hour 48 hour 24 hour				Relinquished by				Date				Time			
8 Data Package (circle if required)				Relinquished by Commercial Carrier				Date				Time			
Type I - Full				UPS				FedEx				Other			
Type VI (Raw Data)				Temperature Upon Receipt 08-2.3 °C				Custody Seals Intact?				Yes No			
NJ Reduced															
Other															

eurofins

For Lancaster Laboratories use only
Acct. # 14739 Group # 1397137 Sample # 7092898-911
Instructions on reverse side correspond with circled numbers.

pg. 2 of 2

[illegible]

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management
7053.01

Environmental Sample Administration
Receipt Documentation Log

1397137

Client/Project: XOM MayflowerShipping Container Sealed: (YES) NODate of Receipt: 6/14/13Custody Seal Present * : (YES) NOTime of Receipt: 0925

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

Source Code: 50-1Package: (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	DT124	0.8	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#: Daneslund / 208 Date/Time: 6/14/13 / 0945

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
J	estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

U.S. EPA CLP Data Qualifiers:

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