

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

May 23, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/18/2013

Group Number: 1390927

SDG: PEH62

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(Surface)051713 Grab Surface Water	7061636
WS-002(Surface)051713 Grab Surface Water	7061637
WS-BKG-002(Surface)051713 Grab Surface Water	7061638
WS-005(Surface)051713 Grab Surface Water	7061639
WS-008(Surface)051713 Grab Surface Water	7061640
WS-008(Surface)051713 MS Grab Surface Water	7061641
WS-008(Surface)051713 MSD Grab Surface Water	7061642
WS-008(Surface)051713 DUP Grab Surface Water	7061643
WS-001(Surface)051713 Grab Surface Water	7061644
WS-001(0.5-1.0)051713 Grab Surface Water	7061645
WS-004(Surface)051713 Grab Surface Water	7061646
WS-004(0.5-1.0)051713 Grab Surface Water	7061647
WS-007(Surface)051713 Grab Surface Water	7061648
WS-007(0.5-1.0)051713 Grab Surface Water	7061649
WS-006(Surface)051713 Grab Surface Water	7061650
WS-006(0.5-1.0)051713 Grab Surface Water	7061651
WS-TB-45-051713 Water	7061652

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

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

COPY TO

Attn: Scott Bushroe

ELECTRONIC ExxonMobil
COPY TO
ELECTRONIC ARCADIS
COPY TO

Attn: Michael J. Firth

Attn: Emily Leamer

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1390927

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:**SW-846 8260B 25mL purge, GC/MS Volatiles**

Batch #: H131401AA (Sample number(s): 7061636-7061642, 7061645-7061652 UNSPK: 7061640)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Acetone, 2-Butanone, Tetrahydrofuran, 1,2-Dibromo-3-chloropropane

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: 2-Butanone, Tetrahydrofuran, 1,2-Dibromo-3-chloropropane

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13138WAA026 (Sample number(s): 7061636-7061642, 7061644-7061651 UNSPK: 7061640)

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

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

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7061640, 7061641, 7061646, 7061647, 7061648, 7061649, MS

Sample Description: WS-003(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061636
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:00 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

3SRF- SDG#: PEH62-01

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)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061636
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

3SRF- SDG#: PEH62-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.061	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	16.7	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	0.0243	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.69	0.0640	0.200	1

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

Sample Description: WS-003(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061636
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

3SRF- SDG#: PEH62-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0014 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.82	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0017 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	H131401AA	05/20/2013 20:45	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 20:45	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 13:26	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:04	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-002(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061637
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:50 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

2SRF- SDG#: PEH62-02

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)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061637
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:50 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

2SRF- SDG#: PEH62-02

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.043 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.6	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	0.0201	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-002(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061637
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 09:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

2SRF- SDG#: PEH62-02

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	1.80	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	H131401AA	05/20/2013 21:06	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 21:06	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 13:56	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:15	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-BKG-002(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061638
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:20 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

BKG2- SDG#: PEH62-03

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-BKG-002(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061638
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

BKG2- SDG#: PEH62-03

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	0.052	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	35.0	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	0.0517	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	8.45	0.0640	0.200	1

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

Sample Description: WS-BKG-002(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061638
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

BKG2- SDG#: PEH62-03

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	0.0045 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.37	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0042 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	0.0066	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	H131401AA	05/20/2013 21:27	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 21:27	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 14:26	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:19	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-005(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061639
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

5SRF- SDG#: PEH62-04

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

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

Sample Description: WS-005(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061639
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

5SRF- SDG#: PEH62-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.013 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	0.022 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.060	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.041 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.039 J	0.010	0.052	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	19.4	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	0.0180	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.46	0.0640	0.200	1

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

Sample Description: WS-005(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061639
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 10:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

5SRF- SDG#: PEH62-04

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	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	H131401AA	05/20/2013 21:48	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 21:48	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 14:56	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:22	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-008(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061640
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

8SRF- SDG#: PEH62-05BKG

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	4.2 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-008(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061640
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

8SRF- SDG#: PEH62-05BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.18	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	61.4	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	0.0605	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	14.0	0.0640	0.200	1

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

Sample Description: WS-008(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061640
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

8SRF- SDG#: PEH62-05BKG

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	0.0045 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.42	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0136	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	0.0045 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	H131401AA	05/20/2013 22:10	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 22:10	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 11:57	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 16:37	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-008(Surface)051713 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061641
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MS

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	50	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.2	0.1	0.5	1
02898	Benzene	71-43-2	5.3	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.1	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.0	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.1	0.1	0.5	1
02898	Bromoform	75-25-2	5.1	0.1	0.5	1
02898	Bromomethane	74-83-9	4.9	0.1	0.5	1
02898	2-Butanone	78-93-3	53	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.3	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.4	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.6	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.3	0.1	0.5	1
02898	Chloroethane	75-00-3	5.0	0.1	0.5	1
02898	Chloroform	67-66-3	5.4	0.1	0.5	1
02898	Chloromethane	74-87-3	4.8	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.1	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.3	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	6.5	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.1	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.0	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.2	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.3	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.2	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.4	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.4	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.3	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.2	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.5	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.5	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.3	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.2	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.4	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.4	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.2	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.0	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	5.7	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.2	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.4	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.4	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.0	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	25	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.3	0.2	0.5	1

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

Sample Description: WS-008(Surface)051713 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061641
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.4	0.1	0.5	1
02898	Styrene	100-42-5	5.4	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.3	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	4.9	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	35	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.9	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.0	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.5	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.3	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.4	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.2	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.9	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.3	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.1	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	0.48	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.21	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.96	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.66	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.85	0.010	0.051	1
08357	Chrysene	218-01-9	0.89	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.77	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.93	0.010	0.051	1
08357	Fluorene	86-73-7	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	0.84	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	79.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.156	0.0068	0.0200	1
07046	Barium	7440-39-3	2.15	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0510	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.0	0.0640	0.200	1

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

Sample Description: WS-008(Surface)051713 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061641
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MS

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	0.214	0.0011	0.0150	1
07055	Lead	7439-92-1	0.160	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.41	0.0606	0.100	1
07061	Nickel	7440-02-0	0.545	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.155	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0499	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.533	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00094	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	H131401AA	05/20/2013 22:31	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 22:31	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 12:27	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 16:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-008(Surface)051713 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061642
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MSD

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	68	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.3	0.1	0.5	1
02898	Benzene	71-43-2	5.4	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.2	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.2	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.2	0.1	0.5	1
02898	Bromoform	75-25-2	5.0	0.1	0.5	1
02898	Bromomethane	74-83-9	5.1	0.1	0.5	1
02898	2-Butanone	78-93-3	80	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.4	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.8	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.4	0.1	0.5	1
02898	Chloroethane	75-00-3	5.3	0.1	0.5	1
02898	Chloroform	67-66-3	5.5	0.1	0.5	1
02898	Chloromethane	74-87-3	5.1	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.3	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.4	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	9.7	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.1	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.0	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.1	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.3	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.4	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.3	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.6	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.5	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.3	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.8	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.3	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.6	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.7	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.3	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.2	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.5	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.5	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.3	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.0	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.4	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	5.7	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.3	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.5	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.5	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.1	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	25	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.4	0.2	0.5	1

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

Sample Description: WS-008(Surface)051713 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061642
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	5.5	0.1	0.5	1
02898	Styrene	100-42-5	5.4	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.3	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.1	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	52	2.0	5.0	1
02898	Toluene	108-88-3	5.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	5.0	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	5.1	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.6	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.4	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.5	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.5	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.9	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.4	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.5	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.3	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	1.0	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	0.71	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.99	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.38	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.96	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.74	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.87	0.010	0.051	1
08357	Chrysene	218-01-9	0.90	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.80	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.89	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.81	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	0.85	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	80.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.157	0.0068	0.0200	1
07046	Barium	7440-39-3	2.17	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0514	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.3	0.0640	0.200	1

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

Sample Description: WS-008(Surface)051713 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061642
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

8SRF- SDG#: PEH62-05MSD

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	0.217	0.0011	0.0150	1
07055	Lead	7439-92-1	0.161	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.51	0.0606	0.100	1
07061	Nickel	7440-02-0	0.549	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.152	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0494	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.537	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00094	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	H131401AA	05/20/2013 22:52	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 22:52	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 12:57	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 16:52	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-008(Surface)051713 DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061643
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 11:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

8SRF- SDG#: PEH62-05DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals SM 2340 B-1997			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	62.9	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	0.0613	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
07051	Chromium	7440-47-3	0.0045 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.56	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0136	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	0.0050	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
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 16:45	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-001(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061644
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:35 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

1SRF- SDG#: PEH62-06

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

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

Sample Description: WS-001(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061644
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:35 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

1SRF- SDG#: PEH62-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.079	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.3	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	0.0205	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.93	0.0640	0.200	1

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

Sample Description: WS-001(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061644
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:35 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

1SRF- SDG#: PEH62-06

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	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.82	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	0.0017 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	C131421AA	05/22/2013 11:34	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131421AA	05/22/2013 11:34	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 15:25	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:26	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061645
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:40 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

1-510 SDG#: PEH62-07

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

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

Sample Description: WS-001(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061645
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

1-510 SDG#: PEH62-07

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.036 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.3	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	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.60	0.0640	0.200	1

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

Sample Description: WS-001(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061645
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

1-510 SDG#: PEH62-07

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	1.77	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0014 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	H131401AA	05/20/2013 23:36	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 23:36	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 15:55	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:30	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-004(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061646
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:45 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

4-SRF SDG#: PEH62-08

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	14	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)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061646
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:45 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

4-SRF SDG#: PEH62-08

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	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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.012 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.013 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	39.3	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0152 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.199	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.52	0.0640	0.200	1

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

Sample Description: WS-004(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061646
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:45 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

4-SRF SDG#: PEH62-08

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	0.0282	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0285	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.97	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0230	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	0.0392	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	H131401AA	05/20/2013 23:57	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 23:57	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 16:25	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:34	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061647
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

4-510 SDG#: PEH62-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	7.3	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)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061647
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

4-510 SDG#: PEH62-09

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	4.4	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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.017 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.018 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	47.5	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0185 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.254	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	9.52	0.0640	0.200	1

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

Sample Description: WS-004(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061647
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 12:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

4-510 SDG#: PEH62-09

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	0.0347	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0439	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.76	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0292	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	0.0478	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000070 J	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131401AA	05/21/2013 00:19	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 00:19	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 16:55	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:37	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-007(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061648
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:25 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

7-SRF SDG#: PEH62-10

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

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

Sample Description: WS-007(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061648
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:25 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

7-SRF SDG#: PEH62-10

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.015 J	0.010	0.050	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	43.0	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0192 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.285	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.10	0.0640	0.200	1

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

Sample Description: WS-007(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061648
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:25 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

7-SRF SDG#: PEH62-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0394	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0370	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.13	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0331	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	0.0560	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000078 J	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131401AA	05/21/2013 00:40	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 00:40	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 17:25	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:41	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061649
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

7-510 SDG#: PEH62-11

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	5.2	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	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)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061649
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:30 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

7-510 SDG#: PEH62-11

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	2.7	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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	0.016 J	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.022 J	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.015 J	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.046 J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.012 J	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.015 J	0.010	0.050	1
08357	Chrysene	218-01-9	0.049 J	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.080	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.015 J	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.072	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	45.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0211	0.0068	0.0200	1
07046	Barium	7440-39-3	0.301	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.79	0.0640	0.200	1

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

Sample Description: WS-007(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061649
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

7-510 SDG#: PEH62-11

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	0.0402	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0430	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.34	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0338	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	0.0566	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000086 J	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H131401AA	05/21/2013 01:01	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 01:01	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 17:55	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:45	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 06:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-006(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061650
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

6SRF- SDG#: PEH62-12

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

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

Sample Description: WS-006(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061650
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

6SRF- SDG#: PEH62-12

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	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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.046 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	16.6	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0150 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0191	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.71	0.0640	0.200	1

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

Sample Description: WS-006(Surface)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061650
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:50 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

6SRF- SDG#: PEH62-12

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	
07051	Chromium	7440-47-3	0.0017 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.79	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	H131401AA	05/21/2013 01:23	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 01:23	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 18:24	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 17:49	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 07:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061651
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:55 by TM

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

6-510 SDG#: PEH62-13

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

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

Sample Description: WS-006(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061651
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:55 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

6-510 SDG#: PEH62-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	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.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.043 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	0.0084 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0209	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	3.74	0.0640	0.200	1

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

Sample Description: WS-006(0.5-1.0)051713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061651
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013 13:55 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/18/2013 09:15

PO Box 4416

Reported: 05/23/2013 10:08

Houston TX 77210-4416

6-510 SDG#: PEH62-13

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	0.0015 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.80	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	H131401AA	05/21/2013 01:44	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 01:44	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13138WAA026	05/19/2013 18:54	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13138WAA026	05/19/2013 03:00	Sherry L Morrow	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	131396256010	05/19/2013 06:50	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07046	Barium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
01750	Calcium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07051	Chromium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07055	Lead	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07061	Nickel	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07036	Selenium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07066	Silver	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131381848001	05/18/2013 18:00	John P Hook	1
00259	Mercury	SW-846 7470A	1	131385713001	05/19/2013 07:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131381848001	05/18/2013 12:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131385713001	05/18/2013 11:35	Damary Valentin	1

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

Sample Description: WS-TB-45-051713 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061652
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

TB45- SDG#: PEH62-14TB*

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-45-051713 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7061652
LLI Group # 1390927
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/17/2013

ExxonMobil

Submitted: 05/18/2013 09:15

Mobil Pipeline Company

Reported: 05/23/2013 10:08

PO Box 4416

Houston TX 77210-4416

TB45- SDG#: PEH62-14TB*

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	H131401AA	05/20/2013 20:23	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/20/2013 20:23	Kevin A Sposito	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 10:08 AM

Group Number: 1390927

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: C131421AA	Sample number(s): 7061644								
Acetone	N.D.	3.0	5.0	ug/l	108		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	99		61-130		
Benzene	N.D.	0.1	0.5	ug/l	106		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	107		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	104		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	110		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	101		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	112		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	105		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	109		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	108		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	102		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	105		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	91		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	106		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	113		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	110		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	104		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		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	107		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	111		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	108		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	120		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	105		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	105		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	108		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	104		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	95		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	104		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	110		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	100		61-125		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1390927

Reported: 05/23/13 at 10:08 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	105		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	101		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	104		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	108		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Styrene	N.D.	0.1	0.5	ug/l	109		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	102		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	114		65-131		
Toluene	N.D.	0.1	0.5	ug/l	105		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	106		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	108		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	100		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	102		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	105		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	98		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	106		80-120		

Batch number: H131401AA

Sample number(s): 7061636-7061642,7061645-7061652

Acetone	N.D.	3.0	5.0	ug/l	100		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	98		61-130		
Benzene	N.D.	0.1	0.5	ug/l	98		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	99		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	97		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	100		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	95		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	102		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	99		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	94		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	100		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	91		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	99		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	99		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	100		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	100		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	99		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	99		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	81		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	101		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	99		80-120		

*- 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: 1390927

Reported: 05/23/13 at 10:08 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	105		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	101		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	97		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	97		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	101		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	96		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	104		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	99		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	92		61-125		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	98		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	100		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	100		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	101		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Styrene	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		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	100		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	102		65-131		
Toluene	N.D.	0.1	0.5	ug/l	99		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	94		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	97		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	99		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	102		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	97		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	97		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	97		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	94		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	99		80-120		

Batch number: 13138WAA026

Sample number(s): 7061636-7061642,7061644-7061651

Acenaphthene	N.D.	0.010	0.050	ug/l	104		65-124		
Acenaphthylene	N.D.	0.010	0.050	ug/l	106		72-113		
Anthracene	N.D.	0.010	0.050	ug/l	108		70-117		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	104		75-115		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	107		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	113		74-130		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	114		63-121		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	112		74-118		
Chrysene	N.D.	0.010	0.050	ug/l	105		75-112		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	112		66-122		
Fluoranthene	N.D.	0.010	0.050	ug/l	107		73-116		
Fluorene	N.D.	0.010	0.050	ug/l	101		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	108		66-122		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	109		72-114		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107		74-119		
Naphthalene	N.D.	0.030	0.050	ug/l	104		67-118		
Phenanthrene	N.D.	0.030	0.050	ug/l	104		72-109		
Pyrene	N.D.	0.010	0.050	ug/l	101		71-116		

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1390927

Reported: 05/23/13 at 10:08 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131381848001	Sample number(s): 7061636-7061651								
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	105		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	102		90-112		
Calcium	0.0847 J	0.0640	0.200	mg/l	104		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	104		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	106		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	101		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	107		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	99		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	99		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	104		90-110		

Batch number: 131385713001

Sample number(s): 7061636-7061651

Mercury	N.D.	0.00007	0.00020	mg/l	97		80-120		
---------	------	---------	---------	------	----	--	--------	--	--

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
Batch number: C131421AA	Sample number(s): 7061644 UNSPK: P065232								
Acetone	125	123	57-163	2	30				
Allyl Chloride	96	100	67-139	4	30				
Benzene	101	103	87-126	2	30				
Bromobenzene	106	108	80-123	2	30				
Bromochloromethane	104	108	82-125	5	30				
Bromodichloromethane	105	106	82-133	1	30				
Bromoform	112	110	60-138	2	30				
Bromomethane	102	107	41-145	5	30				
2-Butanone	123	117	63-146	6	30				
n-Butylbenzene	107	111	83-131	3	30				
sec-Butylbenzene	109	113	84-128	4	30				
tert-Butylbenzene	110	115	84-135	4	30				
Carbon Tetrachloride	108	110	81-148	2	30				
Chlorobenzene	110	112	78-133	2	30				
Chloroethane	104	109	70-139	5	30				
Chloroform	104	107	86-136	2	30				
Chloromethane	93	98	55-152	6	30				
2-Chlorotoluene	108	111	81-120	3	30				
4-Chlorotoluene	110	113	82-119	3	30				
1,2-Dibromo-3-chloropropane	133	128	43-143	4	30				
Dibromochloromethane	111	112	79-125	1	30				
1,2-Dibromoethane	105	108	84-127	2	30				
Dibromomethane	105	104	83-126	1	30				
1,2-Dichlorobenzene	108	109	83-117	1	30				
1,3-Dichlorobenzene	109	111	81-118	2	30				
1,4-Dichlorobenzene	107	109	79-120	2	30				
Dichlorodifluoromethane	71	74	28-136	4	30				
1,1-Dichloroethane	101	105	88-136	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: 05/23/13 at 10:08 AM

Group Number: 1390927

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
1,2-Dichloroethane	101	102	82-135	0	30				
1,1-Dichloroethene	107	111	83-150	4	30				
cis-1,2-Dichloroethene	103	105	82-129	1	30				
trans-1,2-Dichloroethene	103	106	88-127	3	30				
Dichlorofluoromethane	122	130	59-176	6	30				
1,2-Dichloropropane	108	110	91-126	1	30				
1,3-Dichloropropane	107	107	80-127	0	30				
2,2-Dichloropropane	100	105	80-134	5	30				
1,1-Dichloropropene	104	108	86-139	3	30				
cis-1,3-Dichloropropene	102	103	74-132	1	30				
trans-1,3-Dichloropropene	96	98	71-128	3	30				
Ethyl ether	98	100	67-127	2	30				
Ethylbenzene	110	112	80-140	2	30				
Freon 113	107	111	87-158	3	30				
Hexachlorobutadiene	104	106	65-128	2	30				
Isopropylbenzene	110	113	81-133	3	30				
p-Isopropyltoluene	110	113	84-124	2	30				
Methyl Tertiary Butyl Ether	95	96	82-132	1	30				
4-Methyl-2-Pentanone	113	110	69-149	2	30				
Methylene Chloride	100	104	84-122	3	30				
n-Propylbenzene	108	111	79-131	3	30				
Styrene	112	114	63-151	1	30				
1,1,1,2-Tetrachloroethane	109	110	87-126	1	30				
1,1,2,2-Tetrachloroethane	113	110	75-131	3	30				
Tetrachloroethene	107	109	75-129	2	30				
Tetrahydrofuran	115	116	56-154	1	30				
Toluene	106	108	83-127	1	30				
1,2,3-Trichlorobenzene	97	100	73-125	3	30				
1,2,4-Trichlorobenzene	101	102	77-120	1	30				
1,1,1-Trichloroethane	103	107	85-140	4	30				
1,1,2-Trichloroethane	113	114	85-129	0	30				
Trichloroethene	106	108	85-131	2	30				
Trichlorofluoromethane	106	110	67-161	4	30				
1,2,3-Trichloropropane	109	105	76-120	4	30				
1,2,4-Trimethylbenzene	109	112	87-126	3	30				
1,3,5-Trimethylbenzene	111	114	89-129	2	30				
Vinyl Chloride	102	106	65-151	4	30				
Xylene (Total)	110	113	81-137	3	30				

Batch number: H131401AA	Sample number(s): 7061636-7061642,7061645-7061652 UNSPK: 7061640								
Acetone	123	170*	57-163	30	30				
Allyl Chloride	104	106	67-139	2	30				
Benzene	106	109	87-126	2	30				
Bromobenzene	103	104	80-123	1	30				
Bromochloromethane	100	104	82-125	3	30				
Bromodichloromethane	101	103	82-133	2	30				
Bromoform	102	101	60-138	2	30				
Bromomethane	98	103	41-145	5	30				
2-Butanone	140	213*	63-146	41*	30				
n-Butylbenzene	107	109	83-131	2	30				
sec-Butylbenzene	107	108	84-128	1	30				
tert-Butylbenzene	107	116	84-135	8	30				

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 10:08 AM

Group Number: 1390927

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
Carbon Tetrachloride	112	114	81-148	2	30				
Chlorobenzene	107	108	78-133	1	30				
Chloroethane	101	106	70-139	5	30				
Chloroform	107	110	86-136	3	30				
Chloromethane	97	101	55-152	5	30				
2-Chlorotoluene	103	107	81-120	4	30				
4-Chlorotoluene	106	108	82-119	3	30				
1,2-Dibromo-3-chloropropane	130	193*	43-143	39*	30				
Dibromochloromethane	102	102	79-125	0	30				
1,2-Dibromoethane	101	100	84-127	0	30				
Dibromomethane	100	103	83-126	3	30				
1,2-Dichlorobenzene	104	106	83-117	2	30				
1,3-Dichlorobenzene	106	108	81-118	2	30				
1,4-Dichlorobenzene	104	106	79-120	2	30				
Dichlorodifluoromethane	88	92	28-136	5	30				
1,1-Dichloroethane	108	110	88-136	2	30				
1,2-Dichloroethane	106	106	82-135	0	30				
1,1-Dichloroethene	116	116	83-150	0	30				
cis-1,2-Dichloroethene	105	107	82-129	2	30				
trans-1,2-Dichloroethene	110	112	88-127	1	30				
Dichlorofluoromethane	109	114	59-176	5	30				
1,2-Dichloropropane	106	107	91-126	1	30				
1,3-Dichloropropane	104	104	80-127	0	30				
2,2-Dichloropropane	109	110	80-134	1	30				
1,1-Dichloropropene	109	111	86-139	1	30				
cis-1,3-Dichloropropene	104	106	74-132	2	30				
trans-1,3-Dichloropropene	99	99	71-128	0	30				
Ethyl ether	106	108	67-127	2	30				
Ethylbenzene	108	109	80-140	1	30				
Freon 113	113	114	87-158	1	30				
Hexachlorobutadiene	104	105	65-128	1	30				
Isopropylbenzene	109	110	81-133	1	30				
p-Isopropyltoluene	108	109	84-124	2	30				
Methyl Tertiary Butyl Ether	100	101	82-132	1	30				
4-Methyl-2-Pentanone	99	99	69-149	1	30				
Methylene Chloride	106	107	84-122	1	30				
n-Propylbenzene	107	110	79-131	3	30				
Styrene	109	109	63-151	0	30				
1,1,1,2-Tetrachloroethane	105	105	87-126	0	30				
1,1,2,2-Tetrachloroethane	98	103	75-131	5	30				
Tetrachloroethene	111	111	75-129	0	30				
Tetrahydrofuran	140	208*	56-154	39*	30				
Toluene	108	109	83-127	1	30				
1,2,3-Trichlorobenzene	98	100	73-125	2	30				
1,2,4-Trichlorobenzene	101	102	77-120	2	30				
1,1,1-Trichloroethane	109	112	85-140	2	30				
1,1,2-Trichloroethane	105	107	85-129	2	30				
Trichloroethene	108	109	85-131	2	30				
Trichlorofluoromethane	104	110	67-161	5	30				
1,2,3-Trichloropropane	99	99	76-120	0	30				
1,2,4-Trimethylbenzene	106	108	87-126	2	30				
1,3,5-Trimethylbenzene	107	110	89-129	2	30				

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 10:08 AM

Group Number: 1390927

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Vinyl Chloride	102	107	65-151	5	30				
Xylene (Total)	108	110	81-137	1	30				

Batch number: 13138WAA026 Sample number(s): 7061636-7061642,7061644-7061651 UNSPK: 7061640

Acenaphthene	103	101	59-127	2	30				
Acenaphthylene	109	106	33-146	3	30				
Anthracene	47*	70	69-119	38*	30				
Benzo(a)anthracene	98	98	67-124	1	30				
Benzo(a)pyrene	20*	37*	64-123	59*	30				
Benzo(b)fluoranthene	94	95	61-133	0	30				
Benzo(g,h,i)perylene	64	73	36-138	12	30				
Benzo(k)fluoranthene	83	86	59-128	3	30				
Chrysene	88	89	62-118	1	30				
Dibenz(a,h)anthracene	75	79	32-141	5	30				
Fluoranthene	91	88	65-123	4	30				
Fluorene	105	103	69-124	2	30				
Indeno(1,2,3-cd)pyrene	77	80	29-143	3	30				
1-Methylnaphthalene	111	111	67-117	1	30				
2-Methylnaphthalene	110	110	71-126	0	30				
Naphthalene	104	103	58-131	1	30				
Phenanthrene	110	108	67-117	2	30				
Pyrene	83	84	59-125	1	30				

Batch number: 131381848001

Sample number(s): 7061636-7061651 UNSPK: 7061640 BKG: 7061640

Arsenic	104	105	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	105	105	78-118	1	20	0.0605	0.0613	1	20
Cadmium	102	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	101	107	81-118	1	20	14.0	14.4	3	20
Chromium	105	106	81-120	1	20	0.0045 J	0.0045 J	0 (1)	20
Lead	107	108	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	100	105	75-125	1	20	6.42	6.56	2	20
Nickel	106	107	86-115	1	20	0.0136	0.0136	0 (1)	20
Selenium	103	101	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	100	99	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	106	107	90-111	1	20	0.0045 J	0.0050	10 (1)	20

Batch number: 131385713001

Sample number(s): 7061636-7061651 UNSPK: 7061640 BKG: 7061640

Mercury	94	94	80-120	0	20	N.D.	N.D.	0 (1)	20
---------	----	----	--------	---	----	------	------	-------	----

Surrogate Quality Control

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

Analysis Name: NHDES VOCs 25ml purge

Batch number: C131421AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7061644	102	100	100	97

*- 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: 1390927

Reported: 05/23/13 at 10:08 AM

Surrogate Quality Control

Blank	102	101	100	97
LCS	102	99	101	100
MS	101	99	101	99
MSD	100	98	101	99

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

Analysis Name: NHDES VOCs 25ml purge

Batch number: H131401AA

Dibromofluoromethane 1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene

7061636	100	101	101	98
7061637	99	99	101	99
7061638	100	101	101	98
7061639	99	101	101	99
7061640	100	101	100	99
7061641	99	101	101	99
7061642	99	101	101	99
7061645	100	99	100	98
7061646	100	101	101	99
7061647	99	100	101	98
7061648	100	101	101	100
7061649	100	102	99	97
7061650	100	100	100	98
7061651	100	99	101	98
7061652	98	100	100	98
Blank	99	102	100	99
LCS	99	101	101	101
MS	99	101	101	99
MSD	99	101	101	99

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

Analysis Name: PAHs in waters by SIM

Batch number: 13138WAA026

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

7061636	107	98	109
7061637	107	104	109
7061638	104	106	106
7061639	104	83	106
7061640	91	58*	113
7061641	92	54*	111
7061642	89	63	110
7061644	107	96	110
7061645	104	89	109
7061646	44*	25*	72
7061647	53*	49*	70
7061648	49*	31*	68
7061649	48*	31*	67
7061650	105	100	107
7061651	106	99	109
Blank	103	112	105
LCS	103	115	106
MS	92	54*	111

*- 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: 1390927

Reported: 05/23/13 at 10:08 AM

Surrogate Quality Control

MSD	89	63	110
Limits:	64-120	62-141	58-134

*- Outside of specification

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

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 14739

For Eurofins Lancaster Laboratories use only
Group # 1390927 Sample # 7061636-52
Instructions on reverse side correspond with circled numbers.

Pg. 1 of 2

1 Client Information				4 Matrix				5 Analyses Requested												SCR#: _____	
Facility #/SID <u>Mayflower Pipe Incident</u>				☐ Sediment ☐ Potable ☐ Ground ☐ NPDES ☒ Surface ☐ Water ☐ Air ☐ Oil ☐ Total # of Containers				Preservation Code												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
Site Address <u>Mayflower, AR</u>																					
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE																		6 Remarks <u>Data Analysis Questions!</u> <u>Lyndi Mott/ARCADIS</u>	
Consultant/Office <u>ARCADIS</u>																					
Consultant PM <u>Steve Rerrick</u>		Consultant Phone # <u>919-302-6799</u>																			
Sampler <u>859-559-5680</u> <u>Tyler Milburn / Denny Mays</u>																					
2 Sample Identification			3 Collected		Grab	Composite															
			Date	Time																	
WS-003 (surface) 051713			5/17/13	0900	✓																
WS-002 (surface) 051713				0950	✓																
WS-BKG-002 (surface) 051713				1020	✓																
WS-005 (surface) 051713				1050	✓																
WS-008 (surface) 051713				1130	✓																
WS-008 (surface) 051713 MS/MSD				1130	✓																
WS-001 (surface) 051713				1235	✓																
WS-001 (0.5-1.0) 051713				1240	✓																
WS-004 (surface) 051713				1245	✓																
WS-004 (0.5-1.0) 051713				1250	✓																
WS-007 (surface) 051713				1325	✓																
WS-007 (0.5-1.0) 051713			↓	1330	✓																
7 Turnaround Time Requested (TAT) (please circle) Standard 5 day 4 day <u>72 hour</u> 48 hour 24 hour						Relinquished by <u>Tyler Miller</u>		Date <u>5/17/13</u>	Time <u>1600</u>	Received by		Date	Time	9 <u>5/18/13</u> <u>0915</u>							
						Relinquished by		Date	Time	Received by		Date	Time								
						Relinquished by		Date	Time	Received by		Date	Time								
						Relinquished by Commercial Carrier		UPS _____ FedEx ☒ Other _____		Received by		Date	Time								
8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____						EDD (circle if required) Locus EIM (default) Other _____						Temperature Upon Receipt <u>2.8-4.0</u> °C		Custody Seals Intact? <u>Yes</u> No							

Acct. # 14739

For Eurofins Lancaster Laboratories use only
Group # 1390927 Sample # 7061636-52
Instructions on reverse side correspond with circled numbers.

pg. 2 of 2

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.
Page 62 of 66

Issued by Dept. 40 Management
7053 0413

14739 1390927 7061636-52

Jill M. Parker

From: Chandler, Jennifer [Jennifer.Chandler@arcadis-us.com]
Sent: Saturday, May 18, 2013 2:02 PM
To: Kathy Klinefelter; Mott, Lyndi; Jill M. Parker
Subject: RE: 1390927, PEH 62 - Sample receipt discrepancies

Hi,

Please proceed.

Thank you,
Jennifer

Jennifer Chandler | Scientist 2 | jennifer.chandler@arcadis-us.com
ARCADIS U.S., Inc. | 630 Plaza Drive, Suite 100 | Highlands Ranch, CO, 80129
T. 303.471.3549 | F. 720.344.3535

www.arcadis-us.com

Please consider the environment before printing this email.

From: Kathy Klinefelter [mailto:KKlinefelter@lancasterlabs.com]
Sent: Saturday, May 18, 2013 11:39 AM
To: Chandler, Jennifer; Mott, Lyndi; Jill M. Parker
Subject: FW: 1390927, PEH 62 - Sample receipt discrepancies

Hi Jennifer,

Please advise.

Thanks,

Kathy Klinefelter
Principal Project Manager, Environmental Client Services

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-556-7256
Fax: 717-656-6766

Website: www.LancasterLabsEnv.com

From: Jill M. Parker
Sent: Saturday, May 18, 2013 11:49 AM
To: 'Mott, Lyndi'
Cc: Kathy Klinefelter
Subject: 1390927, PEH 62 - Sample receipt discrepancies

Lyndi,

Attached is the surface water COC received today. We received two sets of containers labeled WS-007(Surface) and two sets of containers labeled WS-007(0.5-1.0) but no containers labeled WS-006(Surface) or WS-006(0.5-1.0). However, one set of WS-007(Surface) containers and one set of WS-007(0.5-1.0) containers were labeled with the collection information from the COC for WS-006(Surface) and WS-006(0.5-1.0). We will label these

5/18/2013

14739 1390927 7061636-52

containers as WS-006, not WS-007, based on the collection information unless notified otherwise. Let me know if there are any questions.

Thank you,

Jill Parker
Senior Project Manager, Env. Client Services

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-556-7262

Website: www.LancasterLabsEnv.com

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.

6-1390927
Environmental Sample Administration
Receipt Documentation Log

Client/Project: ExxonMobilShipping Container Sealed: YES NODate of Receipt: 5/18/13Custody Seal Present *: YES NOTime of Receipt: 0915

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

Source Code: 50Package: 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	DTBI	1.6	TB	WI	Y	B	Res. Soil
2	↓	1.6	↓	↓	↓	↓	Sen. Soil
3	↓	1.6	↓	↓	↓	↓	Res. Soil
4	↓	2.8	↓	↓	↓	↓	SW
5	↓	4.0	↓	↓	↓	↓	SW
6	↓		↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

~~Extra residential soil not on COC - SO-NS32-EA-001D(1.5-20) 5/17/13~~
 ⑦ Jmp 5/18/13 @ 1350
 WS-006(surface) 051713 says WS-007(surface) 051713 on label
 WS-006-007(surface) 051713 says OK CMC 5/18/13
 WS-006(0.5-1.0) 051713 says WS-007(0.5-1.0) 051713 on label
 ↑ times are correct labeled by time

Unpacker Signature/Emp#:

Carey 964
 Issued by Dept. 6042 Management

Date/Time: 5/18/13 1015

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.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.