

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: 05/19/2013

Group Number: 1391012

SDG: PEH65

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
WS-003(Surface)051813 Grab Surface Water	7062298
WS-002(Surface)051813 Grab Surface Water	7062299
WS-BKG-002(Surface)051813 Grab Surface Water	7062300
WS-005(Surface)051813 Grab Surface Water	7062301
WS-008(Surface)051813 Grab Surface Water	7062302
WS-001(Surface)051813 Grab Surface Water	7062303
WS-001(0.5-1.0)051813 Grab Surface Water	7062304
WS-004(Surface)051813 Grab Surface Water	7062305
WS-004(0.5-1.0)051813 Grab Surface Water	7062306
WS-007(Surface)051813 Grab Surface Water	7062307
WS-007(0.5-1.0)051813 Grab Surface Water	7062308
WS-006(Surface)051813 Grab Surface Water	7062309
WS-006(0.5-1.0)051813 Grab Surface Water	7062310
DUP-27-WS-051813 Grab Surface Water	7062311
WS-TB-46-051813 Water	7062312

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Scott Bushroe
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth

ELECTRONIC ARCADIS
COPY TO

Attn: Emily Leamer

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1391012

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: C131411AA (Sample number(s): 7062304-7062305, 7062307-7062312 UNSPK: 7062307)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Dibromochloromethane, 4-Chlorotoluene, 1,3-Dichlorobenzene

Batch #: H131401AA (Sample number(s): 7062298-7062300 UNSPK: P61640)

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 outside acceptance windows: 2-Butanone, Tetrahydrofuran, 1,2-Dibromo-3-chloropropane

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13140WAA026 (Sample number(s): 7062298-7062304, 7062307-7062311)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7062302, 7062307, 7062308, 7062309, 7062311

Batch #: 13142WAB026 (Sample number(s): 7062305-7062306)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 1-Methylnaphthalene, Fluoranthene, Benzo(a)anthracene, Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7062305, 7062306

Sample #s: 7062298, 7062299, 7062300, 7062301, 7062303, 7062304, 7062307, 7062308, 7062310

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

Sample #s: 7062302, 7062309, 7062311

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

Sample #s: 7062305, 7062306

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported. The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted and the QC is compliant. However, the sample surrogate recoveries were outside of QC limits in the re-extraction. Similar results were obtained in both trials.

Sample Description: WS-003 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062298
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 08:15 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18003 SDG#: PEH65-01

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) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062298**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 08:15 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18003 SDG#: PEH65-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.1 J	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	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

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

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	0.0175	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-003 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062298
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 08:15 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18003 SDG#: PEH65-01

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	
01750	Calcium	7440-70-2	3.60	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0015 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 02:05	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 02:05	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 07:15	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 12:50	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 12:50	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 12:50	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 07:54	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 09:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-002 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062299
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 08:40 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18002 SDG#: PEH65-02

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) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062299**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 08:40 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18002 SDG#: PEH65-02

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 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						
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	0.011 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.039 J	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
06256	Total Hardness as CaCO3	471-34-1	15.8	0.064	0.20	1
SW-846 6010B						
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0155	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-002 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062299
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 08:40 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18002 SDG#: PEH65-02

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	
01750	Calcium	7440-70-2	3.50	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.72	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0013 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	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 02:27	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 02:27	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 07:44	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:01	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:01	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:01	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:05	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: **WS-BKG-002 (Surface) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062300**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 08:55 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18BK2 SDG#: PEH65-03

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) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062300**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 08:55 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18BK2 SDG#: PEH65-03

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	35.1	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0472	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: **WS-BKG-002 (Surface) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062300**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 08:55 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18BK2 SDG#: PEH65-03

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	
01750	Calcium	7440-70-2	8.30	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0051 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	3.48	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	0.0074	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 03:10	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H131401AA	05/21/2013 03:10	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 08:13	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 12:22	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 12:22	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 12:22	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 07:28	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-005 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062301
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 09:15 by TM ExxonMobil
Submitted: 05/19/2013 09:30 Mobil Pipeline Company
Reported: 05/23/2013 11:03 PO Box 4416
Houston TX 77210-4416

18005 SDG#: PEH65-04

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) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062301**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 09:15 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18005 SDG#: PEH65-04

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	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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	18.0	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	0.0184	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-005 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062301
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 09:15 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18005 SDG#: PEH65-04

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	
01750	Calcium	7440-70-2	4.11	0.0640	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.89	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0016 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	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	C131402AA	05/21/2013 04:07	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131402AA	05/21/2013 04:07	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 08:41	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:05	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:05	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:05	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:09	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-008 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062302
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 09:40 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18008 SDG#: PEH65-05

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

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

Sample Description: **WS-008 (Surface) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062302**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 09:40 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18008 SDG#: PEH65-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.013 J	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	0.011 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.043 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.020 J	0.010	0.051	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	78.3	0.064	0.20	1

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

Sample Description: WS-008 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062302
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 09:40 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18008 SDG#: PEH65-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0572	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	17.7	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0028 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.25	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0123	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0032 J	0.0013	0.0050	1
		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	C131402AA	05/21/2013 04:29	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131402AA	05/21/2013 04:29	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 09:10	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:09	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:09	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:09	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:13	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-001(Surface)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062303
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:00 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18011 SDG#: PEH65-06

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)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062303
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:00 by TM ExxonMobil
Submitted: 05/19/2013 09:30 Mobil Pipeline Company
Reported: 05/23/2013 11:03 PO Box 4416
Houston TX 77210-4416

18011 SDG#: PEH65-06

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	0.052	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.2	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	0.0270	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(Surface)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062303
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:00 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18011 SDG#: PEH65-06

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	
01750	Calcium	7440-70-2	3.75	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0019 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.89	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0025 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0027 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	C131402AA	05/21/2013 04:51	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131402AA	05/21/2013 04:51	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 09:39	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:13	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:13	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:13	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:17	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062304
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:05 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18012 SDG#: PEH65-07

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)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062304
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:05 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18012 SDG#: PEH65-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles SW-846 8260B 25mL						
			ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	17.5	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	0.0297	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062304
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:05 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/19/2013 09:30

PO Box 4416

Reported: 05/23/2013 11:03

Houston TX 77210-4416

18012 SDG#: PEH65-07

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	
01750	Calcium	7440-70-2	3.86	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0018 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.90	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0025 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0026 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131411AA	05/21/2013 10:45	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 10:45	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 10:08	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:17	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:17	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:17	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:21	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-004(Surface)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062305
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:15 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18041 SDG#: PEH65-08

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

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

Sample Description: **WS-004(Surface)051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062305**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 10:15 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18041 SDG#: PEH65-08

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	0.3 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	0.051	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	0.013 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.033 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.013 J	0.010	0.051	1

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

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

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

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

Sample Description: WS-004 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062305
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:15 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18041 SDG#: PEH65-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
The sample was re-extracted and the QC is compliant. However, the sample surrogate recoveries were outside of QC limits in the re-extraction. Similar results were obtained in both trials.						
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	40.0	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0088 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.244	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00096 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.29	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0296	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0271	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.30	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0244	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	0.0437	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	C131411AA	05/21/2013 11:07	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 11:07	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13142WAB026	05/22/2013 17:06	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13142WAB026	05/22/2013 02:55	Roman Kuropatkin	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:21	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:21	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:21	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1

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

Sample Description: WS-004(Surface)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062305
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:15 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/19/2013 09:30

PO Box 4416

Reported: 05/23/2013 11:03

Houston TX 77210-4416

18041 SDG#: PEH65-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:24	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062306
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:20 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18042 SDG#: PEH65-09

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	5.7	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)051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062306**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 10:20 by TM ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18042 SDG#: PEH65-09

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	0.5	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	0.012 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.012 J	0.010	0.051	1

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

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

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

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

Sample Description: WS-004(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062306
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:20 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18042 SDG#: PEH65-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
The sample was re-extracted and the QC is compliant. However, the sample surrogate recoveries were outside of QC limits in the re-extraction. Similar results were obtained in both trials.						
Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	42.9	0.064	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0112 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.275	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00098 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.77	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0326	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0331	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.70	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0274	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	0.0485	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	C131402AA	05/21/2013 05:59	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131402AA	05/21/2013 05:59	Kevin A Sposito	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13142WAB026	05/22/2013 17:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	2	13142WAB026	05/22/2013 02:55	Roman Kuropatkin	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:25	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:25	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:25	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1

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

Sample Description: WS-004(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062306
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/19/2013 09:30

PO Box 4416

Reported: 05/23/2013 11:03

Houston TX 77210-4416

18042 SDG#: PEH65-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:28	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-007 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062307
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:40 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18071 SDG#: PEH65-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	3.6 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) 051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062307**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 10:40 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18071 SDG#: PEH65-10

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	2.2	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.014 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	0.022 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.031 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.025 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.097	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.025 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.029 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.084	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.21	0.010	0.051	1
08357	Fluorene	86-73-7	0.011 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.031 J	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	0.034 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.060	0.030	0.051	1
08357	Pyrene	129-00-0	0.16	0.010	0.051	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	44.2	0.064	0.20	1
SW-846 6010B						
			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0105 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.297	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0011 J	0.00036	0.0050	1

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

Sample Description: WS-007 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062307
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:40 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18071 SDG#: PEH65-10

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	
01750	Calcium	7440-70-2	7.57	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0369	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0353	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.15	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0303	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0015 J	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0547	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	C131411AA	05/21/2013 11:52	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 11:52	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 11:35	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:29	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:29	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:29	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:32	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062308
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:45 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18072 SDG#: PEH65-11

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

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

Sample Description: **WS-007(0.5-1.0)051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062308**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 10:45 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18072 SDG#: PEH65-11

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	
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	17	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles SW-846 8270C SIM						
			ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.031 J	0.011	0.053	1
08357	Acenaphthylene	208-96-8	0.060	0.011	0.053	1
08357	Anthracene	120-12-7	0.12	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.37	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.35	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	1.2	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.28	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.43	0.011	0.053	1
08357	Chrysene	218-01-9	1.2	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	0.063	0.011	0.053	1
08357	Fluoranthene	206-44-0	2.5	0.011	0.053	1
08357	Fluorene	86-73-7	0.025 J	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.37	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.012 J	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	0.40	0.032	0.053	1
08357	Pyrene	129-00-0	2.0	0.011	0.053	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
			mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	52.4	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	0.412	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0017 J	0.00036	0.0050	1

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

Sample Description: WS-007(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062308
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 10:45 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18072 SDG#: PEH65-11

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	
01750	Calcium	7440-70-2	8.78	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0469	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0678	0.0051	0.0150	1
01757	Magnesium	7439-95-4	7.39	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0403	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	0.0014 J	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0708	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000083 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	C131411AA	05/21/2013 12:15	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 12:15	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 12:04	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:33	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:33	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:33	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:35	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-006 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062309
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 11:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/19/2013 09:30

PO Box 4416

Reported: 05/23/2013 11:03

Houston TX 77210-4416

18061 SDG#: PEH65-12

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) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062309
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 11:00 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18061 SDG#: PEH65-12

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

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.8	0.064	0.20	1

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

Sample Description: WS-006 (Surface) 051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062309
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 11:00 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18061 SDG#: PEH65-12

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	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0190	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
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	1.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0016 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	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	C131411AA	05/21/2013 12:36	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 12:36	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 12:33	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:37	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:37	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:37	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:39	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062310
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 11:05 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18062 SDG#: PEH65-13

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

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

Sample Description: **WS-006(0.5-1.0)051813 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062310**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013 11:05 by **TM** ExxonMobil
 Submitted: 05/19/2013 09:30 Mobil Pipeline Company
 Reported: 05/23/2013 11:03 PO Box 4416
 Houston TX 77210-4416

18062 SDG#: PEH65-13

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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.0	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	0.0204	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006(0.5-1.0)051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062310
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 11:05 by TM ExxonMobil
Mobil Pipeline Company
Submitted: 05/19/2013 09:30 PO Box 4416
Reported: 05/23/2013 11:03 Houston TX 77210-4416

18062 SDG#: PEH65-13

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	
01750	Calcium	7440-70-2	3.80	0.0640	0.200	1
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	1.83	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0019 J	0.0013	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131411AA	05/21/2013 12:59	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 12:59	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 13:02	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:48	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 16:17	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:48	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:51	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: DUP-27-WS-051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062311
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 by TM

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18D27 SDG#: PEH65-14FD

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

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

Sample Description: DUP-27-WS-051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062311
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/19/2013 09:30

PO Box 4416

Reported: 05/23/2013 11:03

Houston TX 77210-4416

18D27 SDG#: PEH65-14FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	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	0.011 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.053	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.020 J	0.010	0.051	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	79.3	0.064	0.20	1

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

Sample Description: DUP-27-WS-051813 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062311
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013 by TM

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

Submitted: 05/19/2013 09:30
Reported: 05/23/2013 11:03

18D27 SDG#: PEH65-14FD

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	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0579	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.0	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0024 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.34	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0117	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0030 J	0.0013	0.0050	1
		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	C131411AA	05/21/2013 13:22	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 13:22	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13140WAA026	05/21/2013 13:31	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13140WAA026	05/20/2013 19:00	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131406256001	05/20/2013 14:30	Robert Strocko Jr	1
07035	Arsenic	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
01750	Calcium	SW-846 6010B	1	131391848001	05/20/2013 13:52	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	131391848001	05/20/2013 13:52	Joanne M Gates	1
01757	Magnesium	SW-846 6010B	1	131391848001	05/20/2013 13:52	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	131391848001	05/20/2013 08:54	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	131395713001	05/20/2013 10:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131391848001	05/20/2013 00:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131395713001	05/20/2013 06:40	Damary Valentin	1

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

Sample Description: **WS-TB-46-051813 Water**
Mayflower, AR
Pipeline Incident

LLI Sample # **WW 7062312**
 LLI Group # **1391012**
 Account # **14739**

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

Collected: 05/18/2013

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18T46 SDG#: PEH65-15TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	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-46-051813 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7062312
LLI Group # 1391012
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/18/2013

ExxonMobil

Submitted: 05/19/2013 09:30

Mobil Pipeline Company

Reported: 05/23/2013 11:03

PO Box 4416

Houston TX 77210-4416

18T46 SDG#: PEH65-15TB*

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131411AA	05/21/2013 11:30	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131411AA	05/21/2013 11:30	Kerri E Legerlotz	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 11:03 AM

Group Number: 1391012

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: C131402AA	Sample number(s): 7062301-7062303,7062306								
Acetone	N.D.	3.0	5.0	ug/l	130		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	99		61-130		
Benzene	N.D.	0.1	0.5	ug/l	107		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	110		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	105		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	109		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	106		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	120		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	105		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	114		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	110		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	108		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	110		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	98		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	106		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	120		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	103		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	107		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	90		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	109		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	109		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	111		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	125		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	104		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	109		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	107		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		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	106		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	108		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	113		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	99		61-125		

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1391012

Reported: 05/23/13 at 11:03 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/1	107		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/1	105		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/1	95		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/1	96		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/1	111		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/1	104		80-120		
Styrene	N.D.	0.1	0.5	ug/1	110		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/1	111		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/1	103		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/1	108		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/1	124		65-131		
Toluene	N.D.	0.1	0.5	ug/1	107		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/1	91		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/1	92		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/1	110		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/1	107		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/1	107		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/1	109		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/1	99		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/1	106		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/1	106		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/1	103		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/1	109		80-120		

Batch number: C131411AA

Sample number(s): 7062304-7062305,7062307-7062312

Acetone	N.D.	3.0	5.0	ug/1	118		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/1	104		61-130		
Benzene	N.D.	0.1	0.5	ug/1	108		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/1	104		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/1	108		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/1	107		80-120		
Bromoform	N.D.	0.1	0.5	ug/1	108		63-132		
Bromomethane	N.D.	0.1	0.5	ug/1	107		38-146		
2-Butanone	N.D.	1.0	5.0	ug/1	115		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/1	107		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/1	108		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/1	109		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/1	113		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/1	110		80-120		
Chloroethane	N.D.	0.1	0.5	ug/1	108		67-124		
Chloroform	N.D.	0.1	0.5	ug/1	109		80-120		
Chloromethane	N.D.	0.2	0.5	ug/1	99		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/1	107		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/1	108		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/1	114		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/1	110		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/1	105		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/1	108		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/1	105		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/1	108		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/1	105		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/1	85		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/1	110		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/1	109		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/1	113		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/1	108		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: 1391012

Reported: 05/23/13 at 11:03 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>
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	110		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	124		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	112		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	106		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	101		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	110		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	106		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	99		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	105		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	109		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	113		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	104		61-125		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	109		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	108		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	98		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	111		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	108		80-120		
Styrene	N.D.	0.1	0.5	ug/l	110		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	106		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	114		65-131		
Toluene	N.D.	0.1	0.5	ug/l	108		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	97		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	107		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	108		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	110		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	105		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	101		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	108		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	104		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	110		80-120		

Batch number: H131401AA

Sample number(s): 7062298-7062300

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		

*- 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: 1391012

Reported: 05/23/13 at 11:03 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>
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		
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: 13140WAA026

Sample number(s): 7062298-7062304, 7062307-7062311

Acenaphthene	N.D.	0.010	0.050	ug/l	100	97	65-124	3	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	104	101	72-113	4	30
Anthracene	N.D.	0.010	0.050	ug/l	104	101	70-117	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	103	102	75-115	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	103	100	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	117	120	74-130	3	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	103	104	63-121	0	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

Group Number: 1391012

Reported: 05/23/13 at 11:03 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>
Benzo(k) fluoranthene	N.D.	0.010	0.050	ug/l	110	105	74-118	5	30
Chrysene	N.D.	0.010	0.050	ug/l	103	106	75-112	2	30
Dibenz(a,h) anthracene	N.D.	0.010	0.050	ug/l	102	103	66-122	1	30
Fluoranthene	N.D.	0.010	0.050	ug/l	106	105	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	103	99	74-115	4	30
Indeno(1,2,3-cd) pyrene	N.D.	0.010	0.050	ug/l	104	101	66-122	4	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	106	101	72-114	5	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104	99	74-119	5	30
Naphthalene	N.D.	0.030	0.050	ug/l	100	96	67-118	5	30
Phenanthrene	N.D.	0.030	0.050	ug/l	101	99	72-109	1	30
Pyrene	N.D.	0.010	0.050	ug/l	99	97	71-116	2	30

Batch number: 13142WAB026

Sample number(s): 7062305-7062306

Acenaphthene	N.D.	0.010	0.050	ug/l	106	108	65-124	2	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	112	113	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	110	110	70-117	1	30
Benzo(a) anthracene	N.D.	0.010	0.050	ug/l	119*	119*	75-115	0	30
Benzo(a) pyrene	N.D.	0.010	0.050	ug/l	111	109	72-120	2	30
Benzo(b) fluoranthene	N.D.	0.010	0.050	ug/l	121	119	74-130	2	30
Benzo(g,h,i) perylene	N.D.	0.010	0.050	ug/l	119	116	63-121	3	30
Benzo(k) fluoranthene	N.D.	0.010	0.050	ug/l	122*	119*	74-118	2	30
Chrysene	N.D.	0.010	0.050	ug/l	109	109	75-112	0	30
Dibenz(a,h) anthracene	N.D.	0.010	0.050	ug/l	120	116	66-122	3	30
Fluoranthene	N.D.	0.010	0.050	ug/l	114	117*	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	107	108	74-115	2	30
Indeno(1,2,3-cd) pyrene	N.D.	0.010	0.050	ug/l	123*	120	66-122	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	113	116*	72-114	2	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	111	113	74-119	2	30
Naphthalene	N.D.	0.030	0.050	ug/l	108	109	67-118	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	106	108	72-109	2	30
Pyrene	N.D.	0.010	0.050	ug/l	111	112	71-116	1	30

Batch number: 131391848001

Sample number(s): 7062298-7062311

Arsenic	N.D.	0.0068	0.0200	mg/l	99		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	106		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	105		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	104		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	106		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	104		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	103		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	110		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	102		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	108		90-110		

Batch number: 131395713001

Sample number(s): 7062298-7062311

Mercury	N.D.	0.00007	0.00020	mg/l	94		80-120		
		0							

Sample Matrix Quality Control

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

*- 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: 1391012

Reported: 05/23/13 at 11:03 AM

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Batch number: C131402AA	Sample number(s): 7062301-7062303,7062306 UNSPK: P062593								
Acetone	122	138	57-163	11	30				
Allyl Chloride	110	112	67-139	2	30				
Benzene	117	116	87-126	1	30				
Bromobenzene	109	108	80-123	1	30				
Bromochloromethane	113	115	82-125	2	30				
Bromodichloromethane	111	112	82-133	1	30				
Bromoform	112	111	60-138	1	30				
Bromomethane	117	115	41-145	2	30				
2-Butanone	117	133	63-146	13	30				
n-Butylbenzene	116	116	83-131	0	30				
sec-Butylbenzene	118	118	84-128	0	30				
tert-Butylbenzene	117	119	84-135	1	30				
Carbon Tetrachloride	128	128	81-148	0	30				
Chlorobenzene	119	118	78-133	1	30				
Chloroethane	117	117	70-139	0	30				
Chloroform	119	117	86-136	1	30				
Chloromethane	109	110	55-152	1	30				
2-Chlorotoluene	115	114	81-120	1	30				
4-Chlorotoluene	116	115	82-119	1	30				
1,2-Dibromo-3-chloropropane	119	136	43-143	13	30				
Dibromochloromethane	114	114	79-125	0	30				
1,2-Dibromoethane	107	106	84-127	1	30				
Dibromomethane	109	109	83-126	0	30				
1,2-Dichlorobenzene	109	111	83-117	1	30				
1,3-Dichlorobenzene	114	113	81-118	1	30				
1,4-Dichlorobenzene	112	111	79-120	1	30				
Dichlorodifluoromethane	100	97	28-136	2	30				
1,1-Dichloroethane	118	119	88-136	1	30				
1,2-Dichloroethane	112	113	82-135	1	30				
1,1-Dichloroethene	126	128	83-150	2	30				
cis-1,2-Dichloroethene	116	116	82-129	0	30				
trans-1,2-Dichloroethene	122	121	88-127	0	30				
Dichlorofluoromethane	136	135	59-176	1	30				
1,2-Dichloropropane	117	118	91-126	1	30				
1,3-Dichloropropane	108	109	80-127	1	30				
2,2-Dichloropropane	122	124	80-134	2	30				
1,1-Dichloropropene	121	122	86-139	1	30				
cis-1,3-Dichloropropene	106	109	74-132	3	30				
trans-1,3-Dichloropropene	102	103	71-128	1	30				
Ethyl ether	107	107	67-127	0	30				
Ethylbenzene	120	119	80-140	1	30				
Freon 113	129	129	87-158	0	30				
Hexachlorobutadiene	109	112	65-128	3	30				
Isopropylbenzene	119	120	81-133	1	30				
p-Isopropyltoluene	118	117	84-124	0	30				
Methyl Tertiary Butyl Ether	96	101	82-132	4	30				
4-Methyl-2-Pentanone	95	99	69-149	3	30				
Methylene Chloride	117	118	84-122	1	30				
n-Propylbenzene	115	116	79-131	0	30				
Styrene	119	117	63-151	1	30				
1,1,1,2-Tetrachloroethane	116	116	87-126	0	30				
1,1,2,2-Tetrachloroethane	103	102	75-131	1	30				
Tetrachloroethene	122	121	75-129	1	30				
Tetrahydrofuran	119	130	56-154	9	30				

*- Outside of specification

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- (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 11:03 AM

Group Number: 1391012

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Toluene	118	117	83-127	1	30				
1,2,3-Trichlorobenzene	95	100	73-125	5	30				
1,2,4-Trichlorobenzene	100	103	77-120	3	30				
1,1,1-Trichloroethane	122	124	85-140	1	30				
1,1,2-Trichloroethane	112	111	85-129	1	30				
Trichloroethene	119	118	85-131	0	30				
Trichlorofluoromethane	122	120	67-161	2	30				
1,2,3-Trichloropropane	101	101	76-120	0	30				
1,2,4-Trimethylbenzene	115	115	87-126	0	30				
1,3,5-Trimethylbenzene	116	116	89-129	0	30				
Vinyl Chloride	116	117	65-151	1	30				
Xylene (Total)	120	119	81-137	0	30				

Batch number: C131411AA	Sample number(s): 7062304-7062305,7062307-7062312 UNSPK: 7062307
Acetone	136 120 57-163 12 30
Allyl Chloride	104 114 67-139 9 30
Benzene	106 119 87-126 11 30
Bromobenzene	105 117 80-123 11 30
Bromochloromethane	109 115 82-125 5 30
Bromodichloromethane	109 120 82-133 10 30
Bromoform	119 127 60-138 7 30
Bromomethane	110 119 41-145 8 30
2-Butanone	135 140 63-146 4 30
n-Butylbenzene	105 117 83-131 11 30
sec-Butylbenzene	107 119 84-128 11 30
tert-Butylbenzene	110 122 84-135 11 30
Carbon Tetrachloride	114 126 81-148 10 30
Chlorobenzene	113 124 78-133 10 30
Chloroethane	112 122 70-139 8 30
Chloroform	109 121 86-136 11 30
Chloromethane	104 113 55-152 8 30
2-Chlorotoluene	107 119 81-120 11 30
4-Chlorotoluene	110 121* 82-119 10 30
1,2-Dibromo-3-chloropropane	141 138 43-143 2 30
Dibromochloromethane	114 127* 79-125 10 30
1,2-Dibromoethane	107 118 84-127 9 30
Dibromomethane	108 117 83-126 8 30
1,2-Dichlorobenzene	108 117 83-117 8 30
1,3-Dichlorobenzene	107 119* 81-118 11 30
1,4-Dichlorobenzene	107 118 79-120 10 30
Dichlorodifluoromethane	90 91 28-136 1 30
1,1-Dichloroethane	108 121 88-136 11 30
1,2-Dichloroethane	107 119 82-135 11 30
1,1-Dichloroethene	112 126 83-150 12 30
cis-1,2-Dichloroethene	107 120 82-129 12 30
trans-1,2-Dichloroethene	109 123 88-127 12 30
Dichlorofluoromethane	130 140 59-176 7 30
1,2-Dichloropropane	111 123 91-126 10 30
1,3-Dichloropropane	109 119 80-127 8 30
2,2-Dichloropropane	103 117 80-134 13 30
1,1-Dichloropropene	109 122 86-139 11 30
cis-1,3-Dichloropropene	104 119 74-132 13 30

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 11:03 AM

Group Number: 1391012

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
trans-1,3-Dichloropropene	102	113	71-128	11	30				
Ethyl ether	102	113	67-127	11	30				
Ethylbenzene	111	122	80-140	10	30				
Freon 113	113	121	87-158	7	30				
Hexachlorobutadiene	94	102	65-128	8	30				
Isopropylbenzene	110	123	81-133	11	30				
p-Isopropyltoluene	107	119	84-124	11	30				
Methyl Tertiary Butyl Ether	94	105	82-132	10	30				
4-Methyl-2-Pentanone	110	118	69-149	7	30				
Methylene Chloride	106	118	84-122	11	30				
n-Propylbenzene	108	120	79-131	11	30				
Styrene	112	124	63-151	10	30				
1,1,1,2-Tetrachloroethane	112	123	87-126	9	30				
1,1,2,2-Tetrachloroethane	112	117	75-131	5	30				
Tetrachloroethene	109	121	75-129	10	30				
Tetrahydrofuran	127	134	56-154	5	30				
Toluene	109	123	83-127	9	30				
1,2,3-Trichlorobenzene	94	103	73-125	10	30				
1,2,4-Trichlorobenzene	97	107	77-120	10	30				
1,1,1-Trichloroethane	109	120	85-140	10	30				
1,1,2-Trichloroethane	113	122	85-129	8	30				
Trichloroethene	110	123	85-131	11	30				
Trichlorofluoromethane	113	118	67-161	5	30				
1,2,3-Trichloropropane	110	116	76-120	6	30				
1,2,4-Trimethylbenzene	107	121	87-126	12	30				
1,3,5-Trimethylbenzene	108	120	89-129	11	30				
Vinyl Chloride	111	120	65-151	7	30				
Xylene (Total)	111	123	81-137	10	30				
Batch number: H131401AA Sample number(s): 7062298-7062300 UNSPK: P061640									
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				
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				

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 11:03 AM

Group Number: 1391012

Sample Matrix Quality Control

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

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

Batch number: 131391848001

Sample number(s): 7062298-7062311 UNSPK: 7062300 BKG: 7062300

Arsenic	101	101	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	105	105	78-118	0	20	0.0472	0.0492	4	20
Cadmium	105	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	109	104	81-118	2	20	8.30	8.51	2	20
Chromium	104	105	81-120	1	20	0.0051 J	0.0051 J	0 (1)	20
Lead	104	104	75-125	0	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 11:03 AM

Group Number: 1391012

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Magnesium	105	101	75-125	1	20	3.48	3.57	3	20
Nickel	108	108	86-115	1	20	0.0042 J	0.0049 J	14 (1)	20
Selenium	100	100	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	100	99	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	108	108	90-111	0	20	0.0074	0.0079	7 (1)	20
Batch number: 131395713001 Sample number(s): 7062298-7062311 UNSPK: 7062298 BKG: 7062298									
Mercury	95	94	80-120	2	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: C131402AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7062301	105	103	99	96
7062302	104	102	99	97
7062303	105	103	99	94
7062306	105	103	99	96
Blank	106	103	99	95
LCS	102	101	102	100
MS	102	101	102	100
MSD	102	101	102	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: NHDES VOCs 25ml purge
Batch number: C131411AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7062304	103	102	100	98
7062305	103	101	100	97
7062307	104	101	99	98
7062308	104	102	100	97
7062309	104	101	100	97
7062310	104	102	100	97
7062311	103	100	100	97
7062312	104	102	100	97
Blank	104	103	100	98
LCS	102	101	101	101
MS	103	99	102	100
MSD	102	101	102	100
Limits:	77-114	74-113	77-110	78-110

Analysis Name: NHDES VOCs 25ml purge

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/23/13 at 11:03 AM

Group Number: 1391012

Surrogate Quality Control

Batch number: H131401AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7062298	99	99	101	98
7062299	100	98	101	98
7062300	99	99	101	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: 13140WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7062298	100	72	97
7062299	94	70	89
7062300	82	65	87
7062301	100	67	97
7062302	100	57*	101
7062303	88	63	88
7062304	92	72	92
7062307	38*	16*	55*
7062308	24*	12*	42*
7062309	85	50*	90
7062310	92	67	93
7062311	90	40*	97
Blank	100	104	97
LCS	100	106	101
LCSD	97	102	95
Limits:	64-120	62-141	58-134

Analysis Name: PAHs in waters by SIM

Batch number: 13142WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7062305	68	60*	86
7062306	65	60*	75
Blank	101	114	100
LCS	111	125	113
LCSD	111	121	114
Limits:	64-120	62-141	58-134

*- Outside of specification

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories

For Eurofins Lancaster Laboratories use only
 Acct. # 14739 Group # 1391012 Sample # 7062298-312
 Instructions on reverse side correspond with circled numbers.

pg. 1 of 2

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks						
Facility #/SID <u>Mayflower Pipe Incident</u>				Sediment <input type="checkbox"/>	Potable <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input checked="" type="checkbox"/>	Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other						
Site Address <u>Mayflower, AR</u>								Oil <input type="checkbox"/>	Air <input type="checkbox"/>	Total # of Containers														
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		Soil <input type="checkbox"/>	Water <input type="checkbox"/>	NPDES <input type="checkbox"/>	VOCs 8260B			PAH 8270 SIM	Hardness	RRA Metals + A, V, Cr, Mn									6 Data Analysis Questions! Lyndi Matt/ARCADIS			
Consultant/Office <u>ARCADIS</u>																								
Consultant PM <u>Steve Borrick</u>		Consultant Phone # <u>919-302-6799</u>																						
Sampler <u>859-559-5689</u> <u>Tyler Milburn / Josh Oliver</u>																								
2 Sample Identification		3 Collected																						
		Date	Time	Grab	Composite																			
WS-003 (surface) 051813		5/18/13	0815	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-002 (surface) 051813			0840	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-BKG-002 (surface) 051813			0855	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-005 (surface) 051813			0915	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-008 (surface) 051813			0940	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-001 (surface) 051813			1000	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-001 (0.5-1.0) 051813			1005	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-004 (surface) 051813			1015	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-004 (0.5-1.0) 051813			1020	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-007 (surface) 051813			1040	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-007 (0.5-1.0) 051813			1045	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
WS-006 (surface) 051813			1100	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>																		
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>Tyler Miller</u>		Date <u>5/18/13</u>	Time <u>1300</u>	Received by		Date	Time	9												
Standard 5 day 4 day <u>72 hour</u> 48 hour 24 hour				Relinquished by		Date	Time	Received by		Date	Time													
				Relinquished by		Date	Time	Received by		Date	Time													
8 Data Package (circle if required)				Relinquished by Commercial Carrier		Temperature Upon Receipt <u>0.5-0.9 °C</u>		Received by <u>Waharanda/PSL</u>		Date <u>5/19/13</u>	Time <u>0930</u>	Custody Seals Intact? <u>Yes</u> No												
Type I - Full Type VI (Raw Data) NJ Reduced Other _____				EDD (circle if required) Locus EIM (default) Other _____		UPS _____ FedEx _____ <u>Other Southwest</u>																		

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories

Acct. # 14739

For Eurofins Lancaster Laboratories use only
 Group # 1391012 Sample # 7062298-312
Instructions on reverse side correspond with circled numbers.

pg. 2 of 2

1 Client Information				4 Matrix			5 Analyses Requested										6 Remarks																																																					
Facility #/SID <u>Mayflower Pipe Incident</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Air <input type="checkbox"/>	Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Total # of Containers 6 6 2	Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other																																																					
Site Address <u>Mayflower, AR</u>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">#</td> <td style="width: 20px; text-align: center;">N</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> </table>										#	N																	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
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2 Sample Identification		3 Collected		Grab <input type="checkbox"/> Composite <input type="checkbox"/>			Total # of Containers 6 6 2										Total # of Containers 6 6 2																																																					
		Date	Time																VOCs 8260B PAH 8270 SIM RURA Metals + Ni, V, Cr, Mg																																																			
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<u>Dup-27-WS-051813</u>		<u>5/18/13</u>	<u>—</u>																																																																			
<u>WS-TB-46-051813</u>		<u>5/18/13</u>	<u>—</u>	VOCs 8260B PAH 8270 SIM RURA Metals + Ni, V, Cr, Mg																																																																		
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>5/18/13</u>	Time <u>1300</u>	Received by		Date	Time																																																										
				Relinquished by			Date	Time	Received by		Date	Time																																																										
				Relinquished by			Date	Time	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 _____		Relinquished by Commercial Carrier			Received by <u>Delon.../Resl/</u>		Date <u>5/19/13</u>	Time <u>0930</u>																																																												
				UPS _____ FedEx _____ Other <u>Southwest</u>			Temperature Upon Receipt <u>0.5-0.9 °C</u>		Custody Seals Intact?		<u>Yes</u>	No																																																										

Environmental Sample Administration 1391012
Receipt Documentation Log

Client/Project: XOM Mayflower
Date of Receipt: 5/19/13
Time of Receipt: 0930
Source Code: 01

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

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.5	TB	WI	Y	B	
2	↓	0.9	↓	↓	↓	↓	
3	_____						
4	_____						
5	_____						
6	_____						

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Daneski/208 Date/Time: 5/19/13/1205

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>$ 25%	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA $<$ 0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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