REVISED

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

June 17, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/27/2013
Group Number: 1392782
SDG: PEH83
PO Number: 4510076246
Release Number: MAYFLOWER 1406
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LLI) #
WS-003(Surface)052613 Grab Surface Water	7071911
WS-002(Surface)052613 Grab Surface Water	7071912
WS-BKG-002(Surface)052613 Grab Surface Water	7071913
WS-005(Surface)052613 Grab Surface Water	7071914
WS-008(Surface)052613 Grab Surface Water	7071915
WS-001(Surface)052613 Grab Surface Water	7071916
WS-001(0.5-1.0)052613 Grab Surface Water	7071917
WS-004(Surface)052613 Grab Surface Water	7071918
WS-004(0.5-1.0)052613 Grab Surface Water	7071919
WS-007(Surface)052613 Grab Surface Water	7071920
WS-007(0.5-1.0)052613 Grab Surface Water	7071921
WS-006(Surface)052613 Grab Surface Water	7071922
WS-006(0.5-1.0)052613 Grab Surface Water	7071923
DUP-WS-30-052613 Grab Surface Water	7071924
WS-TB-54-052613 Water	7071925

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1392782

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13148WAK026 (Sample number(s): 7071911-7071924)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Pyrene, Chrysene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7071914, 7071918, 7071919, 7071920, 7071921

Sample #s: 7071915, 7071924

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for MS/MSD or MS/DUP analysis.
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

Sample #s: 7071911, 7071912, 7071913, 7071916, 7071917, 7071919, 7071922

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

Sample #s: 7071918

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
pyrene

Sample #s: 7071920

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.
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 outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:
acenaphthylene .02 ug/l
fluorene .01 ug/l
anthracene .03 ug/l
benzo(k)fluoranthene .20 ug/l
benzo(a)pyrene .08 ug/l
indeno(1,2,3-cd)pyrene .14 ug/l
dibenz(a,h)anthracene .02 ug/l
benzo(g,h,i)perylene .09 ug/l
were detected in the re-extraction of the sample.

Sample #s: 7071921, 7071923

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.
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 outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Sample #s: 7071914

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

SW-846 6010B, Metals

Batch #: 131471848006 (Sample number(s): 7071911-7071924 UNSPK: 7071917 BKG: 7071917)

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

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Analysis Report

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Sample Description: WS-003(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071911
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:10 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00326 SDG#: PEH83-01

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Analysis Report

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Sample Description: WS-003(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071911
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:10 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00326 SDG#: PEH83-01

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 purge**		**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	0.4 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.	0.031	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	17.1	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	0.0187	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

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Analysis Report

REVISED

Sample Description: WS-003(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071911
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:10 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00326 SDG#: PEH83-01

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	3.85	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	1.82	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	I131491AA	05/29/2013 14:08	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 14:08	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 12:35	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 17:44	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071912
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00226 SDG#: PEH83-02

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**		ug/l	ug/l	ug/l	
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

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Analysis Report

REVISED

Sample Description: WS-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071912
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00226 SDG#: PEH83-02

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**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	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	0.0192	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

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Analysis Report

REVISED

Sample Description: WS-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071912
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 08:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00226 SDG#: PEH83-02

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	3.86	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	1.82	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	I131491AA	05/29/2013 14:29	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 14:29	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 13:04	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 17:47	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-BKG-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071913
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

BKG26 SDG#: PEH83-03

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 purge**		ug/l	ug/l	ug/l	
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

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Analysis Report

REVISED

Sample Description: WS-BKG-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071913
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

BKG26 SDG#: PEH83-03

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 purge**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	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	28.9	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0393	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

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Analysis Report

REVISED

Sample Description: WS-BKG-002(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071913
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

BKG26 SDG#: PEH83-03

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	6.78	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	2.91	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0036 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0038 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	I131491AA	05/29/2013 14:50	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 14:50	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 13:33	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 17:58	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-005(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071914
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00526 SDG#: PEH83-04

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 purge**		ug/l	ug/l	ug/l	
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

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Analysis Report

REVISED

Sample Description: WS-005(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071914
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00526 SDG#: PEH83-04

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 purge**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

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

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.7	0.064	0.20	1

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

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Analysis Report

REVISED

Sample Description: WS-005(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071914
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00526 SDG#: PEH83-04

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**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0146	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.33	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	1.90	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	I131491AA	05/29/2013 15:11	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 15:11	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 14:02	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:02	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-008(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071915
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:50 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00826 SDG#: PEH83-05

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 purge**		ug/l	ug/l	ug/l	
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

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Analysis Report

REVISED

Sample Description: WS-008(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071915
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:50 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00826 SDG#: PEH83-05

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 purge**		**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	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.014 J	0.010	0.052	1

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

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

Metals	**SM 2340 B-1997**	**mg/l**	**mg/l**	**mg/l**

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

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Analysis Report

REVISED

Sample Description: WS-008(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071915
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:50 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00826 SDG#: PEH83-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	81.6	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0643	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.8	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.44	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0062 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0016 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131491AA	05/29/2013 15:32	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 15:32	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 14:30	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:05	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:23	Damary Valentin	1

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

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Analysis Report

REVISED

Sample Description: WS-008(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071915
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 09:50 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00826 SDG#: PEH83-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-001(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071916
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:20 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00126 SDG#: PEH83-06

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Analysis Report

REVISED

Sample Description: WS-001(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071916
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:20 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00126 SDG#: PEH83-06

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 purge**		**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	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	17.7	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0276	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

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Analysis Report

REVISED

Sample Description: WS-001(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071916
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:20 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00126 SDG#: PEH83-06

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	3.91	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0021 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.92	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0021 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0029 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	I131491AA	05/29/2013 15:53	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 15:53	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 14:59	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:09	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-001(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071917
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

01026 SDG#: PEH83-07

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Mayflower, AR
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LLI Sample # WW 7071917
LLI Group # 1392782
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01026 SDG#: PEH83-07

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 purge**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.014 J	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.2	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	0.0330	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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Analysis Report

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Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071917
LLI Group # 1392782
Account # 14739

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Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

01026 SDG#: PEH83-07

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	4.00	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0027 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.00	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0031 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	0.0041 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	I131491AA	05/29/2013 16:14	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 16:14	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 15:28	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 17:22	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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Analysis Report

REVISED

Sample Description: WS-004(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071918
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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Mobil Pipeline Company
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00426 SDG#: PEH83-08

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Acetone	67-64-1	4.7 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

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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
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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**	
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08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
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08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.21	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.011 J	0.010	0.050	1

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

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

Metals	**SM 2340 B-1997**	**mg/l**	**mg/l**	**mg/l**

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

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Analysis Report

REVISED

Sample Description: WS-004(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071918
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00426 SDG#: PEH83-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	70.5	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0188 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.395	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0010 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	17.4	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0470	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0379	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.55	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0359	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	0.0676	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	I131491AA	05/29/2013 16:35	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 16:35	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/30/2013 16:54	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:12	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:33	Damary Valentin	1

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

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Analysis Report

REVISED

Sample Description: WS-004(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071918
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00426 SDG#: PEH83-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-004(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071919
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:45 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

04026 SDG#: PEH83-09

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Analysis Report

REVISED

Sample Description: WS-004(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071919
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:45 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

04026 SDG#: PEH83-09

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 purge**		**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	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	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	39.8	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0179 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.306	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00089 J	0.00036	0.0050	1

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

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Analysis Report

REVISED

Sample Description: WS-004(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071919
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 10:45 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

04026 SDG#: PEH83-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	6.41	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0413	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0352	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.78	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0326	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	0.0602	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	I131491AA	05/29/2013 16:55	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 16:55	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 11:45	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:16	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-007(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071920
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:00 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00726 SDG#: PEH83-10

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Acetone	67-64-1	3.5 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

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Analysis Report

REVISED

Sample Description: WS-007(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071920
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:00 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00726 SDG#: PEH83-10

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 purge**		**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	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	0.014 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.022 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	0.034 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.051	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	0.24	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.041 J	0.030	0.051	1
08357	Pyrene	129-00-0	0.047 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 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 outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials with the exception of:

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

REVISED

Sample Description: WS-007(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071920
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:00 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00726 SDG#: PEH83-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
	acenaphthylene .02 ug/l					
	fluorene .01 ug/l					
	anthracene .03 ug/l					
	benzo(k)fluoranthene .20 ug/l					
	benzo(a)pyrene .08 ug/l					
	indeno(1,2,3-cd)pyrene .14 ug/l					
	dibenz(a,h)anthracene .02 ug/l					
	benzo(g,h,i)perylene .09 ug/l					
	were detected in the re-extraction of the sample.					
Metals		**SM 2340 B-1997**	**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	40.4	0.064	0.20	1
		SW-846 6010B	**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0167 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.342	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00069 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.80	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0396	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0297	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.68	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0309	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	0.0573	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	I131491AA	05/29/2013 17:16	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 17:16	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 12:14	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1

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

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Analysis Report

REVISED

Sample Description: WS-007(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071920
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:00 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00726 SDG#: PEH83-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:20	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-007(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071921
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:05 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

07026 SDG#: PEH83-11

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 purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Acetone	67-64-1	3.3 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

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Analysis Report

REVISED

Sample Description: WS-007(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071921
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:05 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

07026 SDG#: PEH83-11

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 purge**		**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	1.2	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	0.016 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	0.061	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.23	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.13	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.45	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.096	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.14	0.010	0.051	1
08357	Chrysene	218-01-9	0.56	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.027 J	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.57	0.010	0.051	1
08357	Fluorene	86-73-7	0.012 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.13	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	0.12	0.030	0.051	1
08357	Pyrene	129-00-0	0.62	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 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 outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

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

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Analysis Report

REVISED

Sample Description: WS-007(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071921
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:05 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

07026 SDG#: PEH83-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	44.3	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0183 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.329	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.00090 J	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.34	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0431	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0442	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.31	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0337	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	0.0634	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	I131491AA	05/29/2013 17:37	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 17:37	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 12:42	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:23	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:39	Damary Valentin	1

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

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Analysis Report

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REVISED

Sample Description: WS-007(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071921
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:05 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

07026 SDG#: PEH83-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-006(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071922
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00626 SDG#: PEH83-12

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Analysis Report

REVISED

Sample Description: WS-006(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071922
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00626 SDG#: PEH83-12

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 purge**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.6	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0241	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

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Analysis Report

REVISED

Sample Description: WS-006(Surface)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071922
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:30 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

00626 SDG#: PEH83-12

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**	
01750	Calcium	7440-70-2	4.19	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0015 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.97	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0023 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	0.0023 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	I131491AA	05/29/2013 17:58	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 17:58	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 13:11	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:27	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-006(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071923
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

06026 SDG#: PEH83-13

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 purge**		ug/l	ug/l	ug/l	
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

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Analysis Report

REVISED

Sample Description: WS-006(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071923
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

06026 SDG#: PEH83-13

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 purge**		**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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.021 J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	0.011 J	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.023 J	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.026 J	0.010	0.050	1

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

The recovery for 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 outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

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

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Analysis Report

REVISED

Sample Description: WS-006(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071923
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

06026 SDG#: PEH83-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.0	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	0.0372	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.16	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0029 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.08	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0037 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	0.0048 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	I131491AA	05/29/2013 18:19	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 18:19	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 13:40	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:30	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:43	Damary Valentin	1

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

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Analysis Report

REVISED

Sample Description: WS-006(0.5-1.0)052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071923
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 11:40 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

06026 SDG#: PEH83-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: DUP-WS-30-052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071924
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

DUP26 SDG#: PEH83-14FD

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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	0.1 J	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

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Analysis Report

REVISED

Sample Description: DUP-WS-30-052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071924
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

DUP26 SDG#: PEH83-14FD

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 purge**		**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	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.014 J	0.010	0.052	1

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

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

Metals	**SM 2340 B-1997**	**mg/l**	**mg/l**	**mg/l**

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

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Analysis Report

REVISED

Sample Description: DUP-WS-30-052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071924
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

DUP26 SDG#: PEH83-14FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	80.5	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	0.0633	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	18.5	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	8.33	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0063 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	I131491AA	05/29/2013 18:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 18:40	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13148WAK026	05/31/2013 14:08	Linda M Hartenstine	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13148WAK026	05/29/2013 09:55	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131486256001	05/28/2013 21:15	John P Hook	1
07035	Arsenic	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07046	Barium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07049	Cadmium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
01750	Calcium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07051	Chromium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07055	Lead	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
01757	Magnesium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07061	Nickel	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07036	Selenium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07066	Silver	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
07071	Vanadium	SW-846 6010B	1	131471848006	05/28/2013 18:41	John P Hook	1
00259	Mercury	SW-846 7470A	1	131475713006	05/29/2013 08:45	Damary Valentin	1

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

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Analysis Report

REVISED

Sample Description: DUP-WS-30-052613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071924
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013 by JW

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

DUP26 SDG#: PEH83-14FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131471848006	05/28/2013 10:45	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131475713006	05/28/2013 16:30	Nelli S Markaryan	1

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

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Analysis Report

REVISED

Sample Description: WS-TB-54-052613 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071925
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

TB-26 SDG#: PEH83-15TB*

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 purge**		**ug/l**	**ug/l**	**ug/l**	
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

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Analysis Report

REVISED

Sample Description: WS-TB-54-052613 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7071925
LLI Group # 1392782
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/26/2013

Submitted: 05/27/2013 10:43
Reported: 06/17/2013 08:35

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

TB-26 SDG#: PEH83-15TB*

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 purge**		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	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	I131491AA	05/29/2013 13:47	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131491AA	05/29/2013 13:47	Jason M Long	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1392782
Reported: 06/17/13 at 08:35 AM

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

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I131491AA	Sample number(s): 7071911-7071925								
Acetone	N.D.	3.0	5.0	ug/l	88		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	107		61-130		
Benzene	N.D.	0.1	0.5	ug/l	100		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	101		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	105		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	118		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	103		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	99		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	110		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	109		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	101		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	102		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	100		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	109		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	107		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	107		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	91		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	115		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	108		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	104		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	107		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	116		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	107		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	111		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	101		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	108		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	106		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	100		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	99		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	95		61-125		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Group Number: 1392782
Reported: 06/17/13 at 08:35 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	108		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	110		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	109		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	116		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	106		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	110		80-120		
Styrene	N.D.	0.1	0.5	ug/l	114		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	108		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	116		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	99		65-131		
Toluene	N.D.	0.1	0.5	ug/l	105		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	90		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	100		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	100		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	114		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	98		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	99		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	112		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	109		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	109		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	109		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	107		80-120		
Batch number: 13148WAK026	Sample number(s): 7071911-7071924								
Acenaphthene	N.D.	0.010	0.050	ug/l	102	103	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	107	108	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	107	110	70-117	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	108	110	75-115	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	107	110	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	114	119	74-130	4	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	102	103	63-121	1	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	111	117	74-118	5	30
Chrysene	N.D.	0.010	0.050	ug/l	111	114*	75-112	3	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	90	96	66-122	7	30
Fluoranthene	N.D.	0.010	0.050	ug/l	102	105	73-116	2	30
Fluorene	N.D.	0.010	0.050	ug/l	104	106	74-115	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	99	101	66-122	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	102	105	72-114	3	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	100	103	74-119	3	30
Naphthalene	N.D.	0.030	0.050	ug/l	101	102	67-118	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	105	107	72-109	2	30
Pyrene	N.D.	0.010	0.050	ug/l	118*	121*	71-116	2	30
Batch number: 131471848006	Sample number(s): 7071911-7071924								
Arsenic	N.D.	0.0068	0.0200	mg/l	97		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	102		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	100		90-112		
Calcium	0.130 J	0.0640	0.200	mg/l	103		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	101		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	97		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	102		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	94		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	101		90-110		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Group Number: 1392782
Reported: 06/17/13 at 08:35 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131475713006	Sample number(s): 7071911-7071924								
Mercury	N.D.	0.00007	0.00020	mg/l	95		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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: I131491AA	Sample number(s): 7071911-7071925 UNSPK: P069132								
Acetone	118	105	57-163	12	30				
Allyl Chloride	104	107	67-139	3	30				
Benzene	100	100	87-126	0	30				
Bromobenzene	102	102	80-123	0	30				
Bromochloromethane	94	97	82-125	2	30				
Bromodichloromethane	102	103	82-133	1	30				
Bromoform	110	110	60-138	0	30				
Bromomethane	99	102	41-145	3	30				
2-Butanone	116	100	63-146	15	30				
n-Butylbenzene	107	107	83-131	0	30				
sec-Butylbenzene	111	110	84-128	0	30				
tert-Butylbenzene	108	109	84-135	0	30				
Carbon Tetrachloride	105	105	81-148	0	30				
Chlorobenzene	102	103	78-133	0	30				
Chloroethane	101	101	70-139	0	30				
Chloroform	100	100	86-136	1	30				
Chloromethane	107	108	55-152	1	30				
2-Chlorotoluene	104	104	81-120	0	30				
4-Chlorotoluene	104	104	82-119	0	30				
1,2-Dibromo-3-chloropropane	99	82	43-143	18	30				
Dibromochloromethane	105	104	79-125	1	30				
1,2-Dibromoethane	106	107	84-127	1	30				
Dibromomethane	99	99	83-126	0	30				
1,2-Dichlorobenzene	102	102	83-117	0	30				
1,3-Dichlorobenzene	104	105	81-118	1	30				
1,4-Dichlorobenzene	102	103	79-120	1	30				
Dichlorodifluoromethane	102	102	28-136	0	30				
1,1-Dichloroethane	103	103	88-136	0	30				
1,2-Dichloroethane	99	100	82-135	1	30				
1,1-Dichloroethene	111	110	83-150	1	30				
cis-1,2-Dichloroethene	100	100	82-129	1	30				
trans-1,2-Dichloroethene	103	104	88-127	1	30				
Dichlorofluoromethane	116	116	59-176	0	30				
1,2-Dichloropropane	104	105	91-126	1	30				
1,3-Dichloropropane	105	105	80-127	0	30				
2,2-Dichloropropane	102	103	80-134	0	30				
1,1-Dichloropropene	104	105	86-139	1	30				
cis-1,3-Dichloropropene	105	105	74-132	0	30				
trans-1,3-Dichloropropene	100	102	71-128	2	30				
Ethyl ether	92	94	67-127	3	30				

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil Group Number: 1392782
Reported: 06/17/13 at 08:35 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	105	105	80-140	0	30				
Freon 113	106	104	87-158	1	30				
Hexachlorobutadiene	101	100	65-128	1	30				
Isopropylbenzene	108	108	81-133	0	30				
p-Isopropyltoluene	109	110	84-124	1	30				
Methyl Tertiary Butyl Ether	101	103	82-132	2	30				
4-Methyl-2-Pentanone	102	110	69-149	8	30				
Methylene Chloride	101	101	84-122	0	30				
n-Propylbenzene	109	109	79-131	0	30				
Styrene	110	109	63-151	0	30				
1,1,1,2-Tetrachloroethane	103	103	87-126	1	30				
1,1,2,2-Tetrachloroethane	105	105	75-131	0	30				
Tetrachloroethene	115	116	75-129	0	30				
Tetrahydrofuran	100	86	56-154	15	30				
Toluene	104	104	83-127	0	30				
1,2,3-Trichlorobenzene	87	90	73-125	3	30				
1,2,4-Trichlorobenzene	96	98	77-120	2	30				
1,1,1-Trichloroethane	102	102	85-140	0	30				
1,1,2-Trichloroethane	106	106	85-129	0	30				
Trichloroethene	101	102	85-131	1	30				
Trichlorofluoromethane	100	99	67-161	0	30				
1,2,3-Trichloropropane	101	104	76-120	3	30				
1,2,4-Trimethylbenzene	106	106	87-126	0	30				
1,3,5-Trimethylbenzene	107	108	89-129	0	30				
Vinyl Chloride	110	112	65-151	2	30				
Xylene (Total)	105	105	81-137	0	30				
Batch number: 131471848006	Sample number(s): 7071911-7071924 UNSPK: 7071917 BKG: 7071917								
Arsenic	100	102	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	103	104	78-118	1	20	0.0330	0.0331	0	20
Cadmium	101	102	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	101	102	81-118	0	20	4.00	3.97	1	20
Chromium	103	106	81-120	2	20	0.0027 J	0.0028 J	5 (1)	20
Lead	104	104	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	100	102	75-125	1	20	2.00	1.99	0	20
Nickel	105	106	86-115	1	20	0.0031 J	0.0031 J	1 (1)	20
Selenium	101	102	75-125	1	20	N.D.	0.0080 J	200* (1)	20
Silver	94	97	75-125	3	20	N.D.	N.D.	0 (1)	20
Vanadium	103	105	90-111	1	20	0.0041 J	0.0037 J	11 (1)	20
Batch number: 131475713006	Sample number(s): 7071911-7071924 UNSPK: 7071911 BKG: 7071911								
Mercury	94	94	80-120	1	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil
Reported: 06/17/13 at 08:35 AM

Group Number: 1392782

Surrogate Quality Control

Batch number: I131491AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7071911	98	109	101	99
7071912	99	108	102	99
7071913	99	109	100	98
7071914	98	106	100	98
7071915	99	109	101	99
7071916	98	107	101	99
7071917	99	106	101	98
7071918	97	105	101	98
7071919	98	107	100	97
7071920	98	107	100	97
7071921	98	105	100	98
7071922	99	108	101	98
7071923	99	108	100	98
7071924	99	109	100	98
7071925	99	106	101	98
Blank	98	107	100	99
LCS	97	103	102	99
MS	98	105	102	100
MSD	97	106	102	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13148WAK026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7071911	92	73	90
7071912	95	83	89
7071913	89	80	89
7071914	90	60*	92
7071915	93	87	90
7071916	88	68	90
7071917	86	66	88
7071918	23*	13*	34*
7071919	32*	13*	48*
7071920	27*	16*	47*
7071921	32*	15*	45*
7071922	82	67	83
7071923	93	77	94
7071924	95	94	92
Blank	91	94	92
LCS	91	95	95
LCSD	94	99	97
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

eurofins | Lancaster Laboratories

Acct. # 14739 For Eurofins Lancaster Laboratories use only Group # 1392782 Sample # 7071911-25
Instructions on reverse side correspond with circled numbers.

1 of 2

SCR#:

1 Client Information

Facility #/SID: Mayflower Pipeline Incident

Site Address: Mayflower, AR

ExxonMobil PM: Scott Bushroe

Cost Center/AFE:

Consultant/Office: Arcadis-US

Consultant PM: Steve Barrick

Consultant Phone #:

Sampler: J. Waldron / H. Van Aller 7206350173

4 Matrix: Sediment ☐ Soil ☐ Water: Ground ☐ Potable ☐ Surface ☒ NPDES ☐ Air ☐ Oil ☐

5 Analyses Requested — Preservation Code

Preservation Codes: H = HCl; N = HNO_3; S = H_2SO_4; T = Thiosulfate; B = NaOH; O = Other

6 Remarks: Data Analysis questions: Lyndi Mott/Arcadis

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Total # of Containers	VOC 8260B (H)	PAH 8270 SIM (H)	RCRA metals + hardness (N)
WS-003(surface)052613	5/26/13	0810	X		6	X	X	X
WS-002(surface)052613		0840	X		6	X	X	X
WS-BKG-002(surface)052613		0940	X		6	X	X	X
WS-005(surface)052613		0930	X		6	X	X	X
WS-008(surface)052613		0950	X		6	X	X	X
WS-001(surface)052613		1020	X		6	X	X	X
WS-001(0.5-1.0) 052613		1030	X		6	X	X	X
WS-004(surface)052613		1040	X		6	X	X	X
WS-004(0.5-1.0)052613		1045	X		6	X	X	X
WS-007(surface)052613		1100	X		6	X	X	X
WS-007(0.5-1.0)052613		1105	X		6	X	X	X
WS-006(surface)052613		1130	X		6	X	X	X

7 Turnaround Time Requested (TAT) (please circle): Standard; (5 day); 4 day; 72 hour; 48 hour; 24 hour

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	Date	Time	Received by	Date	Time
H Van Aller	5/26/13	1445	[signature]	5/26/13	1530
[signature]	5/26/13	1730			
Relinquished by Commercial Carrier: UPS ____ FedEx ____ (Other) Southwest			Received by: Annelise H. Owen	5/27/13	1043

Temperature Upon Receipt 1.6-1.7°C

Custody Seals Intact? (Yes) No

9

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 14739 For Eurofins Lancaster Laboratories use only Group # 1392782 Sample # 7071911-25
Instructions on reverse side correspond with circled numbers.

2 of 2

SCR#:

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: Arcadis-US
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: J. Waldron / H. Van Alker

4 Matrix: Soil ☐ Sediment ☐ Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☒ Oil ☐ Air ☐

5 Analyses Requested — Preservation Code

2 Sample Identification / **3 Collected**

Sample Identification	Date	Time	Grab	Composite	Total # of Containers	VOC 8260B (H)	PAH 8270 SIM	RCRA metals + Ni, Mg, V, Ca, hardness (N)
WS-006(0.5-1.0)052613	5/26/13	1140	X		6	X	X	X
DUP-WS-30-052613		—	X		6	X	X	X
WS-TB-54-052613	—	—	X		2	X		

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

6 Remarks
Data Analysis questions: Lyndi Mott/ARCADIS

7 Turnaround Time Requested (TAT) (please circle)
Standard 5 day 4 day
72 hour 48 hour 24 hour

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	Date	Time	Received by	Date	Time
H Van Alker	5/26/13	1445	[illegible]	5/26/13	1530
[illegible]	5/26/13	1730			
Relinquished by Commercial Carrier: UPS ___ FedEx ___ Other Southwest			Received by Annalisa H. Owen	5/27/13	1043

Temperature Upon Receipt 1.6-1.7 °C

Custody Seals Intact? Yes No

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1392782

Client/Project: XOM - Mayflower

Date of Receipt: 5/27/13

Time of Receipt: 1043

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	2.1	TB	WI	Y	B	
2	↓	1.8	↓	↓	↓	↓	
3	↓	1.5	↓	↓	↓	↓	
4	↓	1.7	↓	↓	↓	↓	
5	↓	1.6	↓	↓	↓	↓	
6							

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

Paperwork Discrepancy/Unpacking Problems:

~~SO-NS44-EA-TB-01-052613: only 1 vial received~~ AHO 5/27/13

Unpacker Signature/Emp#: Annelise H. Owen / 210 **Date/Time:** 5/27/13 1100

Issued by Dept. 6042 Management

2174.06

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 limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ 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 ≥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.