

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

May 16, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 05/11/2013

Group Number: 1389245

SDG: PEH39

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LLI)

WS-003(SURFACE)051013 Grab Surface Water	7052848
WS-002(SURFACE)051013 Grab Surface Water	7052849
WS-BKG-002(SURFACE)051013 Grab Surface Water	7052850
WS-005(SURFACE)051013 Grab Surface Water	7052851
WS-008(SURFACE)051013 Grab Surface Water	7052852
WS-001(SURFACE)051013 Grab Surface Water	7052853
WS-001(0.5-1.0)051013 Grab Surface Water	7052854
WS-004(SURFACE)051013 Grab Surface Water	7052855
WS-004(0.5-1.0)051013 Grab Surface Water	7052856
WS-007(SURFACE)051013 Grab Surface Water	7052857
WS-007(0.5-1.0)051013 Grab Surface Water	7052858
WS-006(SURFACE)051013 Grab Surface Water	7052859
WS-006(0.5-1.0)051013 Grab Surface Water	7052860
WS-TB38-051013 Water	7052861
WS-DUP-23-051013 Grab Surface Water	7052862

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

COPY TO

Attn: Scott Bushroe

ELECTRONIC ExxonMobil

COPY TO

Attn: Michael J. Firth

ELECTRONIC ARCADIS
COPY TO

Attn: Emily Leamer

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1389245

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: I131331AA (Sample number(s): 7052848-7052862 UNSPK: P50289)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Methylene Chloride, trans-1,2-Dichloroethene, 1,2-Dichloropropane, Toluene, Tetrachloroethene, 1,2-Dibromoethane, 1,1,1,2-Tetrachloroethane, Isopropylbenzene, Bromobenzene, 2-Chlorotoluene, 1,3,5-Trimethylbenzene, 4-Chlorotoluene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, p-Isopropyltoluene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, Hexachlorobutadiene

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13133WAD026 (Sample number(s): 7052848-7052860, 7052862)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7052850, 7052855, 7052856, 7052857, 7052858

Sample #s: 7052848, 7052849, 7052851, 7052852, 7052853, 7052854, 7052859, 7052860, 7052862

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

Sample #s: 7052850, 7052855, 7052856, 7052857, 7052858

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

Sample Description: WS-003 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052848
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-3 SDG#: PEH39-01

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

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

Sample Description: WS-003 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052848
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-3 SDG#: PEH39-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 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	0.049 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	16.2	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	0.0269	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-003 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052848
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-3 SDG#: PEH39-01

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	3.48	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0013 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.82	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0017 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131331AA	05/13/2013 14:13	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 14:13	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 19:50	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:17	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 05:51	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052849
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-2 SDG#: PEH39-02

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

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

Sample Description: WS-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052849
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-2 SDG#: PEH39-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	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	15.0	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	0.0173	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052849
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 09:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-2 SDG#: PEH39-02

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	3.30	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	1.65	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0016 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131331AA	05/13/2013 14:34	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 14:34	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 20:17	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:21	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:03	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-BKG-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052850
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511BK SDG#: PEH39-03

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

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

Sample Description: WS-BKG-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052850
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511BK SDG#: PEH39-03

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

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 CaCO ₃	471-34-1	42.0	0.064	0.20

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

Sample Description: WS-BKG-002 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052850
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511BK SDG#: PEH39-03

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	
07035	Arsenic	7440-38-2	0.0069 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0535	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	9.73	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0046 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0074 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	4.30	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0053 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	0.0065	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	I131331AA	05/13/2013 14:55	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 14:55	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 20:44	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:32	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:05	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-005(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052851
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-5 SDG#: PEH39-04

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

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

Sample Description: WS-005(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052851
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-5 SDG#: PEH39-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	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	16.5	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	0.0140	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-005(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052851
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 10:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-5 SDG#: PEH39-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.73	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	1.76	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0012 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131331AA	05/13/2013 15:16	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 15:16	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 21:11	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:36	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:07	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-008(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052852
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 11:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-8 SDG#: PEH39-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	6.1	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	0.7	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	1.1 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	0.1 J	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	0.3 J	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.1 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-008 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052852
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 11:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-8 SDG#: PEH39-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	1.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	0.5 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	0.3 J	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	2.3	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	0.012 J	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.11	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.014 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.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	59.0	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	0.0627	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-008 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052852
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 11:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-8 SDG#: PEH39-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	13.1	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0040 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0069 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.36	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0131	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0047 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	I131331AA	05/13/2013 15:37	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 15:37	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 21:38	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:40	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:09	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-001(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052853
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-1 SDG#: PEH39-06

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

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

Sample Description: WS-001(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052853
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-1 SDG#: PEH39-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.060	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	15.6	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0240	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052853
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-1 SDG#: PEH39-06

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	3.39	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	1.74	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0020 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	I131331AA	05/13/2013 16:19	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 16:19	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 22:05	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:44	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:12	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-001(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052854
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:10 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

51110 SDG#: PEH39-07

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

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

Sample Description: WS-001(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052854
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:10 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

51110 SDG#: PEH39-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.058	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	16.3	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0318	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-001(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052854
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51110 SDG#: PEH39-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.48	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0023 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0071 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.84	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	0.0038 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	I131331AA	05/13/2013 17:01	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 17:01	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 22:32	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 03:52	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:14	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-004(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052855
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:20 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-4 SDG#: PEH39-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	4.3 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

Sample Description: WS-004 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052855
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-4 SDG#: PEH39-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.4 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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

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

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 CaCO ₃	471-34-1	42.1	0.064	0.20

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

Sample Description: WS-004 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052855
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:20 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-4 SDG#: PEH39-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0127 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.258	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.07	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0370	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0621	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.94	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0302	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	0.0523	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	I131331AA	05/13/2013 17:42	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 17:42	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 23:00	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:48	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:16	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-004(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052856
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

51140 SDG#: PEH39-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	4.2 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-004(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052856
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:30 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

51140 SDG#: PEH39-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	4.0	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	0.054	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.

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 CaCO ₃	471-34-1	44.2	0.064	0.20

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

Sample Description: WS-004(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052856
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:30 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51140 SDG#: PEH39-09

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	
07035	Arsenic	7440-38-2	0.0132 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.268	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.49	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0389	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0672	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.19	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0318	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	0.0550	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	I131331AA	05/13/2013 18:04	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 18:04	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 23:27	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:52	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:18	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-007(SURFACE)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052857
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:40 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-7 SDG#: PEH39-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	4.1 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-007 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052857
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:40 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-7 SDG#: PEH39-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	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	0.022 J	0.010	0.052	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	41.2	0.064	0.20

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

Sample Description: WS-007 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052857
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:40 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-7 SDG#: PEH39-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0108 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.260	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	6.78	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0351	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0584	0.0051	0.0150	1
01757	Magnesium	7439-95-4	5.89	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0285	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	0.0502	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	I131331AA	05/13/2013 18:45	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 18:45	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/15/2013 23:54	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 04:56	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:20	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-007(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052858
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:45 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51170 SDG#: PEH39-11

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

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

Sample Description: WS-007(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052858
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:45 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51170 SDG#: PEH39-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	4.0	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	0.018 J	0.010	0.050	1
08357	Anthracene	120-12-7	0.039 J	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.10	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.070	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.27	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.063	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.087	0.010	0.050	1
08357	Chrysene	218-01-9	0.23	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	0.014 J	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.56	0.010	0.050	1
08357	Fluorene	86-73-7	0.012 J	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.085	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	0.037 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	0.12	0.030	0.050	1
08357	Pyrene	129-00-0	0.52	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	52.7	0.064	0.20

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

Sample Description: WS-007(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052858
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 12:45 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51170 SDG#: PEH39-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0144 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.373	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
01750	Calcium	7440-70-2	7.80	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0544	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0930	0.0051	0.0150	1
01757	Magnesium	7439-95-4	8.06	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0453	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	0.0777	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	I131331AA	05/13/2013 19:06	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 19:06	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/16/2013 00:21	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 05:00	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:22	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-006 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052859
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-6 SDG#: PEH39-12

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

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

Sample Description: WS-006 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052859
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:00 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

511-6 SDG#: PEH39-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.063	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	16.1	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	0.0259	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006 (SURFACE) 051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052859
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:00 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

511-6 SDG#: PEH39-12

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	3.44	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0020 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0053 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.81	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0026 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	I131331AA	05/13/2013 19:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 19:27	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/16/2013 00:48	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 05:04	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:28	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-006(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052860
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51160 SDG#: PEH39-13

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

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

Sample Description: WS-006(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052860
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:10 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

51160 SDG#: PEH39-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.053	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	16.7	0.064	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0312	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-006(0.5-1.0)051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052860
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 13:10 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

51160 SDG#: PEH39-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.56	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0030 J	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.91	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0029 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0044 J	0.0013	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131331AA	05/13/2013 19:48	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 19:48	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/16/2013 01:15	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 05:08	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:30	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Sample Description: WS-TB38-051013 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052861
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

11T38 SDG#: PEH39-14TB

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

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

Sample Description: WS-TB38-051013 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052861
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

11T38 SDG#: PEH39-14TB

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I131331AA	05/13/2013 13:52	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 13:52	Jason M Long	1

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

Sample Description: WS-DUP-23-051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052862
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

11D23 SDG#: PEH39-15FD*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	5.7	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	0.7	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	1.1 J	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	0.1 J	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	0.3 J	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	0.1 J	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: WS-DUP-23-051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052862
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 by TM

ExxonMobil

Submitted: 05/11/2013 09:30

Mobil Pipeline Company

Reported: 05/16/2013 13:46

PO Box 4416

Houston TX 77210-4416

11D23 SDG#: PEH39-15FD*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	1.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	0.5 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	0.3 J	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	2.1	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	0.016 J	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	0.015 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	0.011 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	0.19	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	0.019 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.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	59.0	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	0.0630	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1

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

Sample Description: WS-DUP-23-051013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7052862
LLI Group # 1389245
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/10/2013 by TM

ExxonMobil

Mobil Pipeline Company

Submitted: 05/11/2013 09:30

PO Box 4416

Reported: 05/16/2013 13:46

Houston TX 77210-4416

11D23 SDG#: PEH39-15FD*

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	13.1	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0037 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0059 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	6.37	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0118	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	0.0049 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	I131331AA	05/13/2013 20:09	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I131331AA	05/13/2013 20:09	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13133WAD026	05/16/2013 01:42	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13133WAD026	05/14/2013 10:00	William H Saadeh	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131326256001	05/12/2013 06:21	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131311848001	05/12/2013 05:20	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131315713002	05/12/2013 06:32	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131311848001	05/11/2013 12:10	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131315713002	05/11/2013 20:38	Parker D Lindstrom	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/16/13 at 01:46 PM

Group Number: 1389245

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

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: I131331AA	Sample number(s): 7052848-7052862								
Acetone	N.D.	3.0	5.0	ug/l	89		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	103		61-130		
Benzene	N.D.	0.1	0.5	ug/l	97		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	110		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	99		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	114		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	80		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	98		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	102		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	78		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	96		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	64		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	103		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	103		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	102		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	106		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	105		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	99		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	43		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	96		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	95		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	109		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	101		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	94		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	97		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	94		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	89		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	99		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	102		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: 1389245

Reported: 05/16/13 at 01:46 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCS D %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	105		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	99		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	96		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	101		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Styrene	N.D.	0.1	0.5	ug/l	109		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	101		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	108		65-131		
Toluene	N.D.	0.1	0.5	ug/l	102		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	101		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	102		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	97		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	105		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	97		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	83		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	98		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	72		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	104		80-120		

Batch number: 13133WAD026

Sample number(s): 7052848-7052860, 7052862

Acenaphthene	N.D.	0.010	0.050	ug/l	99	100	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	105	106	72-113	1	30
Anthracene	N.D.	0.010	0.050	ug/l	102	104	70-117	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	108	111	75-115	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	99	101	72-120	2	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	111	112	74-130	1	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	94	103	63-121	9	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	108	109	74-118	0	30
Chrysene	N.D.	0.010	0.050	ug/l	101	105	75-112	3	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	90	102	66-122	12	30
Fluoranthene	N.D.	0.010	0.050	ug/l	106	106	73-116	0	30
Fluorene	N.D.	0.010	0.050	ug/l	102	102	74-115	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	94	103	66-122	10	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105	106	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104	105	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	101	101	67-118	0	30
Phenanthrene	N.D.	0.030	0.050	ug/l	99	101	72-109	2	30
Pyrene	N.D.	0.010	0.050	ug/l	107	108	71-116	1	30

Batch number: 131311848001

Sample number(s): 7052848-7052860, 7052862

Arsenic	N.D.	0.0068	0.0200	mg/l	104		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	103		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	103		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	106		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	102		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	107		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	98		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	103		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	107		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: 1389245

Reported: 05/16/13 at 01:46 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 131315713002	Sample number(s): 7052848-7052860, 7052862								
Mercury	N.D.	0.00007	0.00020	mg/l	97		80-120		
		0							

Sample Matrix Quality Control

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

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: I131331AA	Sample number(s): 7052848-7052862 UNSPK: P050289								
Acetone	91	108	57-163	16	30				
Allyl Chloride	105	122	67-139	15	30				
Benzene	109	126	87-126	15	30				
Bromobenzene	109	127*	80-123	16	30				
Bromochloromethane	107	124	82-125	15	30				
Bromodichloromethane	109	127	82-133	14	30				
Bromoform	115	130	60-138	12	30				
Bromomethane	104	121	41-145	15	30				
2-Butanone	110	116	63-146	5	30				
n-Butylbenzene	109	128	83-131	16	30				
sec-Butylbenzene	114	135*	84-128	16	30				
tert-Butylbenzene	118	139*	84-135	16	30				
Carbon Tetrachloride	117	134	81-148	13	30				
Chlorobenzene	112	129	78-133	14	30				
Chloroethane	101	118	70-139	16	30				
Chloroform	106	125	86-136	14	30				
Chloromethane	102	118	55-152	15	30				
2-Chlorotoluene	111	130*	81-120	16	30				
4-Chlorotoluene	110	130*	82-119	16	30				
1,2-Dibromo-3-chloropropane	133	128	43-143	4	30				
Dibromochloromethane	103	117	79-125	11	30				
1,2-Dibromoethane	112	130*	84-127	15	30				
Dibromomethane	105	123	83-126	15	30				
1,2-Dichlorobenzene	109	128*	83-117	16	30				
1,3-Dichlorobenzene	112	131*	81-118	15	30				
1,4-Dichlorobenzene	111	130*	79-120	16	30				
Dichlorodifluoromethane	97	108	28-136	11	30				
1,1-Dichloroethane	108	126	88-136	15	30				
1,2-Dichloroethane	102	119	82-135	15	30				
1,1-Dichloroethene	122	140	83-150	13	30				
cis-1,2-Dichloroethene	111	128	82-129	14	30				
trans-1,2-Dichloroethene	114	131*	88-127	14	30				
Dichlorofluoromethane	128	146	59-176	13	30				
1,2-Dichloropropane	102	154*	91-126	12	30				
1,3-Dichloropropane	109	125	80-127	14	30				
2,2-Dichloropropane	108	126	80-134	16	30				
1,1-Dichloropropene	113	130	86-139	14	30				
cis-1,3-Dichloropropene	104	119	74-132	13	30				
trans-1,3-Dichloropropene	96	111	71-128	15	30				
Ethyl ether	86	100	67-127	16	30				

*- Outside of specification

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

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 05/16/13 at 01:46 PM

Group Number: 1389245

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	113	131	80-140	15	30				
Freon 113	116	127	87-158	9	30				
Hexachlorobutadiene	111	129*	65-128	15	30				
Isopropylbenzene	117	136*	81-133	15	30				
p-Isopropyltoluene	114	136*	84-124	17	30				
Methyl Tertiary Butyl Ether	106	124	82-132	15	30				
4-Methyl-2-Pentanone	105	122	69-149	15	30				
Methylene Chloride	110	129*	84-122	16	30				
n-Propylbenzene	111	130	79-131	16	30				
Styrene	111	132	63-151	17	30				
1,1,1,2-Tetrachloroethane	113	131*	87-126	15	30				
1,1,2,2-Tetrachloroethane	106	125	75-131	16	30				
Tetrachloroethene	120	138*	75-129	14	30				
Tetrahydrofuran	123	124	56-154	1	30				
Toluene	111	129*	83-127	14	30				
1,2,3-Trichlorobenzene	106	125	73-125	16	30				
1,2,4-Trichlorobenzene	112	131*	77-120	16	30				
1,1,1-Trichloroethane	112	129	85-140	14	30				
1,1,2-Trichloroethane	111	127	85-129	13	30				
Trichloroethene	111	129	85-131	16	30				
Trichlorofluoromethane	108	121	67-161	11	30				
1,2,3-Trichloropropane	104	119	76-120	14	30				
1,2,4-Trimethylbenzene	109	129*	87-126	17	30				
1,3,5-Trimethylbenzene	111	131*	89-129	17	30				
Vinyl Chloride	105	123	65-151	15	30				
Xylene (Total)	115	132	81-137	14	30				

Batch number: 131311848001	Sample number(s): 7052848-7052860,7052862 UNSPK: 7052854 BKG: 7052854								
Arsenic	106	104	81-123	2	20	N.D.	N.D.	0 (1)	20
Barium	105	104	78-118	0	20	0.0318	0.0306	4	20
Cadmium	103	101	83-116	2	20	N.D.	N.D.	0 (1)	20
Calcium	101	99	81-118	1	20	3.48	3.42	1	20
Chromium	104	103	81-120	1	20	0.0023 J	0.0025 J	6 (1)	20
Lead	105	103	75-125	1	20	0.0071 J	0.0065 J	9 (1)	20
Magnesium	103	101	75-125	1	20	1.84	1.83	1	20
Nickel	107	106	86-115	1	20	0.0031 J	0.0028 J	9 (1)	20
Selenium	98	99	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	102	103	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	108	107	90-111	1	20	0.0038 J	0.0041 J	8 (1)	20

Batch number: 131315713002	Sample number(s): 7052848-7052860,7052862 UNSPK: 7052848 BKG: 7052848								
Mercury	98	98	80-120	0	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: NHDES VOCs 25ml purge

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1389245

Reported: 05/16/13 at 01:46 PM

Surrogate Quality Control

Batch number: I131331AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7052848	100	104	98	95
7052849	100	106	99	95
7052850	100	107	99	96
7052851	101	107	98	96
7052852	99	105	100	98
7052853	101	107	98	96
7052854	100	107	98	95
7052855	100	105	98	96
7052856	100	106	98	96
7052857	100	105	98	95
7052858	101	109	98	96
7052859	101	109	98	96
7052860	102	111	98	97
7052861	100	105	99	95
7052862	99	106	99	97
Blank	100	103	98	94
LCS	99	103	101	97
MS	100	103	99	98
MSD	99	101	100	97
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13133WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7052848	97	85	90
7052849	100	90	93
7052850	73	61*	69
7052851	95	83	88
7052852	71	68	76
7052853	96	79	90
7052854	87	73	81
7052855	46*	36*	56*
7052856	32*	15*	52*
7052857	29*	13*	48*
7052858	44*	34*	62
7052859	91	81	86
7052860	80	65	76
7052862	89	79	89
Blank	102	110	95
LCS	101	108	96
LCSD	100	110	96
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.

Acct. # 14739

For Lancaster Laboratories use only
Group # 1389245 Sample # 7052848-62
Instructions on reverse side correspond with circled numbers.

pg. 1 of 2

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

Issued by Dept. 40 Management
7053.01

Acct. # 14739

For Lancaster Laboratories use only
Group # 1389245 Sample # 7C
Instructions on reverse side correspond with circled number

Sample # 7052848-66

pg. 2 of 2

[illegible]

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

Issued by Dept. 40 Management
7053.01

Environmental Sample Administration
Receipt Documentation LogClient/Project: May FlowerShipping Container Sealed: YES NODate of Receipt: 5/11/13Custody Seal Present * : YES NOTime of Receipt: 0930* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: SOPackage: 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	DT12H	1.0	TB	WI	y	B	
2	↓	0.8	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Pat GH 3472 Date/Time: 5/11/13 1023

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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