

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

July 08, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/28/2013

Group Number: 1400470

SDG: PEI57

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-003(Surface)062713 Grab Surface Water	7110837
WS-002(Surface)062713 Grab Surface Water	7110838
WS-005(Surface)062713 Grab Surface Water	7110839
WS-001(Surface)062713 Grab Surface Water	7110840
WS-001(0.5-1.0)062713 Grab Surface Water	7110841
WS-004(Surface)062713 Grab Surface Water	7110842
WS-004(0.5-1.0)062713 Grab Surface Water	7110843
WS-007(Surface)062713 Grab Surface Water	7110844
WS-007(0.5-1.0)062713 Grab Surface Water	7110845
WS-006(Surface)062713 Grab Surface Water	7110846
WS-006(0.5-1.0)062713 Grab Surface Water	7110847
DUP-WS-47-062713 Grab Surface Water	7110848
WS-TB-84-062713 Water	7110849

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

ELECTRONIC COPY TO
ARCADIS

Attn: Stephen Barrick

ELECTRONIC COPY TO
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Attn: Lyndi Mott

ELECTRONIC COPY TO
ExxonMobil

Attn: Michael J. Firth

ELECTRONIC COPY TO
ARCADIS

Attn: Emily Leamer

ELECTRONIC COPY TO
ARCADIS

Attn: Rhiannon Parmalee

ELECTRONIC ARCADIS
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ELECTRONIC ExxonMobil
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ELECTRONIC ExxonMobil
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ELECTRONIC ExxonMobil
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Attn: Jamie Pritchard

Attn: Michael L Sixsmith

Attn: Julie Foster

Attn: Carl Wideman

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1400470

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:**SW-846 8270C SIM, GC/MS Semivolatiles**

Batch #: 13179WAE026 (Sample number(s): 7110837-7110848)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7110837, 7110840, 7110843, 7110844, 7110845, 7110846

Sample #s: 7110845

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time.
Surrogate recoveries were again outside QC acceptance criteria.

Sample #s: 7110843

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time.
Surrogate recoveries were again outside QC acceptance limits.

Sample #s: 7110844

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:
The sample was re-extracted outside the method required holding time.
Surrogate recoveries were within QC acceptance criteria.

Sample #s: 7110837, 7110840, 7110846

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)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110837
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 08:50 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27003 SDG#: PEI57-01

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)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110837
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 08:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27003 SDG#: PEI57-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	25.1	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0243	0.00033	0.0050	1

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

Sample Description: WS-003(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110837
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 08:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27003 SDG#: PEI57-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.76	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.61	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 11:46	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 11:46	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/03/2013 02:24	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 12:53	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 19:42	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110838
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:20 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27002 SDG#: PEI57-02

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)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110838
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:20 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27002 SDG#: PEI57-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	23.6	0.033	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	0.0232	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.44	0.0334	0.200	1

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

Sample Description: WS-002(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110838
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:20 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27002 SDG#: PEI57-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.44	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 12:09	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 12:09	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/03/2013 02:54	Holly Berry	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 12:57	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 19:44	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110839
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:50 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27005 SDG#: PEI57-03

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

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

Sample Description: WS-005(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110839
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27005 SDG#: PEI57-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	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
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	22.9	0.033	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	0.0147	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.28	0.0334	0.200	1

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

Sample Description: WS-005(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110839
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 09:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27005 SDG#: PEI57-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.36	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0025 J	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 12:31	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 12:31	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/03/2013 03:24	Holly Berry	1
10470	BNW Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 13:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 18:47	John P Hook	1
07046	Barium	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
07049	Cadmium	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
01750	Calcium	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
07051	Chromium	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 18:47	John P Hook	1
01757	Magnesium	SW-846 6010B	2	131791848001	07/01/2013 12:09	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 18:47	John P Hook	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 18:47	John P Hook	1
07066	Silver	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
07071	Vanadium	SW-846 6010B	2	131791848001	06/29/2013 18:47	John P Hook	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 19:50	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-001(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110840
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27011 SDG#: PEI57-04

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-001(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110840
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27011 SDG#: PEI57-04

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 recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	23.9	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0291	0.00033	0.0050	1

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

Sample Description: WS-001(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110840
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27011 SDG#: PEI57-04

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	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.48	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.48	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 12:53	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 12:53	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/03/2013 03:54	Holly Berry	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 19:52	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110841
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:50 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27012 SDG#: PEI57-05

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

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

Sample Description: WS-001(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110841
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:50 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27012 SDG#: PEI57-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.4	0.033	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	0.0317	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.84	0.0334	0.200	1

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

Sample Description: WS-001(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110841
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 10:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27012 SDG#: PEI57-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.63	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0022 J	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 13:16	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 13:16	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 04:46	Joseph M Gambler	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:08	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:00	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-004(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110842
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:10 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27041 SDG#: PEI57-06

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	3.2 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(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110842
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:10 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27041 SDG#: PEI57-06

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	0.3 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	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	0.012 J	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	17.3	0.033	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	0.0233	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	4.20	0.0334	0.200	1

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

Sample Description: WS-004(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110842
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:10 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27041 SDG#: PEI57-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	1.65	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0029 J	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000074 J	0.000060	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	C131821AA	07/01/2013 13:38	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 13:38	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 05:16	Joseph M Gambler	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:12	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:02	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-004(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110843
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:20 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27042 SDG#: PEI57-07

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	7.2	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	1.0 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	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)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110843
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:20 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27042 SDG#: PEI57-07

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	11	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.020 J	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.019 J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time. Surrogate recoveries were again outside QC acceptance limits.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	97.2	0.033	0.20
	SW-846 6010B	mg/l	mg/l	mg/l	

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

Sample Description: WS-004(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110843
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:20 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27042 SDG#: PEI57-07

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	
07035	Arsenic	7440-38-2	0.0462	0.0068	0.0200	1
07046	Barium	7440-39-3	0.866	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0019 J	0.00076	0.0050	1
01750	Calcium	7440-70-2	19.5	0.0334	0.200	1
07051	Chromium	7440-47-3	0.146	0.0016	0.0150	1
07055	Lead	7439-92-1	0.574	0.0047	0.0150	1
01757	Magnesium	7439-95-4	11.8	0.0167	0.100	1
07061	Nickel	7440-02-0	0.114	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.0173 J	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.169	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000061 J	0.000060	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	C131821AA	07/01/2013 14:00	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 14:00	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 05:46	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:15	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:04	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-007(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110844
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27071 SDG#: PEI57-08

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-007(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110844
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27071 SDG#: PEI57-08

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	3.0	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	0.020 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.024 J	0.010	0.051	1
08357	Anthracene	120-12-7	0.047 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.11	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.11	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.45	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.070	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.13	0.010	0.051	1
08357	Chrysene	218-01-9	0.34	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.015 J	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.63	0.010	0.051	1
08357	Fluorene	86-73-7	0.026 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.076	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.017 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.015 J	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.16	0.030	0.051	1
08357	Pyrene	129-00-0	0.48	0.010	0.051	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time. Surrogate recoveries were within QC acceptance criteria.

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	22.1	0.033	0.20
	SW-846 6010B	mg/l	mg/l	mg/l	

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

Sample Description: WS-007(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110844
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:40 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27071 SDG#: PEI57-08

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	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0915	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.29	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0025 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0064 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.17	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0029 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0048 J	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 14:22	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 14:22	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 06:16	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:19	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:06	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110845
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:50 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27072 SDG#: PEI57-09

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	6.9	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	1.2 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	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)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110845
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27072 SDG#: PEI57-09

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	10	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.022 J	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.023 J	0.010	0.051	1
08357	Anthracene	120-12-7	0.046 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.091	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.090	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.43	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.067	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.12	0.010	0.051	1
08357	Chrysene	218-01-9	0.29	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.017 J	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.47	0.010	0.051	1
08357	Fluorene	86-73-7	0.026 J	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.076	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.020 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.027 J	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.13	0.030	0.051	1
08357	Pyrene	129-00-0	0.38	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:						
The sample was re-extracted outside the method required holding time. Surrogate recoveries were again outside QC acceptance criteria.						
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	108	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		

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

Sample Description: WS-007(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110845
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 11:50 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27072 SDG#: PEI57-09

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	0.0358	0.0068	0.0200	1
07046	Barium	7440-39-3	0.916	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0018 J	0.00076	0.0050	1
01750	Calcium	7440-70-2	14.5	0.0334	0.200	1
07051	Chromium	7440-47-3	0.121	0.0016	0.0150	1
07055	Lead	7439-92-1	0.238	0.0047	0.0150	1
01757	Magnesium	7439-95-4	17.4	0.0167	0.100	1
07061	Nickel	7440-02-0	0.100	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.0124 J	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.170	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000070 J	0.000060	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	C131821AA	07/01/2013 14:44	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 14:44	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 06:46	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:23	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:08	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110846
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:10 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27061 SDG#: PEI57-10

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

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

Sample Description: WS-006(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110846
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:10 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27061 SDG#: PEI57-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	SM 2340 B-1997		mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO ₃	471-34-1	25.3	0.033	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	0.0333	0.00033	0.0050	1

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

Sample Description: WS-006(Surface)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110846
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:10 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27061 SDG#: PEI57-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.85	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.60	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 15:06	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 15:06	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 07:16	Joseph M Gambler	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:27	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:14	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110847
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:20 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27062 SDG#: PEI57-11

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-006(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110847
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:20 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27062 SDG#: PEI57-11

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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.10	0.010	0.051	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.3	0.033	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	0.0333	0.0033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.81	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110847
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 12:20 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27062 SDG#: PEI57-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.62	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0024 J	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 15:29	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 15:29	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 07:46	Joseph M Gambler	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:16	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: DUP-WS-47-062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110848
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 by JW

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27D47 SDG#: PEI57-12FD

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

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

Sample Description: DUP-WS-47-062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110848
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27D47 SDG#: PEI57-12FD

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	3.0	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	0.024 J	0.010	0.052	1
08357	Acenaphthylene	208-96-8	0.041 J	0.010	0.052	1
08357	Anthracene	120-12-7	0.073	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.18	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.18	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.71	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.099	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.21	0.010	0.052	1
08357	Chrysene	218-01-9	0.53	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.030 J	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.87	0.010	0.052	1
08357	Fluorene	86-73-7	0.029 J	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.11	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	0.017 J	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	0.015 J	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	0.21	0.031	0.052	1
08357	Pyrene	129-00-0	0.72	0.010	0.052	1
Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	20.0	0.033	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	0.0748	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	4.68	0.0334	0.200	1

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

Sample Description: DUP-WS-47-062713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110848
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013 by JW

ExxonMobil

Mobil Pipeline Company

Submitted: 06/28/2013 09:25

PO Box 4416

Reported: 07/08/2013 19:48

Houston TX 77210-4416

27D47 SDG#: PEI57-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		SW-846 6010B	mg/l	mg/l	mg/l	
07051	Chromium	7440-47-3	0.0027 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0078 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.03	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0030 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0058	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	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	C131821AA	07/01/2013 15:51	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 15:51	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13179WAE026	07/04/2013 08:16	Joseph M Gambler	1
10470	BNP Water Extraction (SIM)	SW-846 3510C	1	13179WAE026	06/29/2013 16:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131826256001	07/01/2013 07:00	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	131791848001	06/29/2013 13:42	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	131795713001	06/30/2013 20:18	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131791848001	06/29/2013 06:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131795713001	06/28/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-TB-84-062713 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110849
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27T84 SDG#: PEI57-13TB*

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

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

Sample Description: WS-TB-84-062713 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7110849
LL Group # 1400470
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/27/2013

ExxonMobil

Submitted: 06/28/2013 09:25

Mobil Pipeline Company

Reported: 07/08/2013 19:48

PO Box 4416

Houston TX 77210-4416

27T84 SDG#: PEI57-13TB*

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	C131821AA	07/01/2013 10:39	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131821AA	07/01/2013 10:39	Kerri E Legerlotz	1

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

Quality Control SummaryClient Name: ExxonMobil
Reported: 07/08/13 at 07:48 PM

Group Number: 1400470

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: C131821AA	Sample number(s): 7110837-7110849								
Acetone	N.D.	3.0	5.0	ug/l	95		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	87		61-130		
Benzene	N.D.	0.1	0.5	ug/l	106		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	117		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	109		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	122		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	97		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	97		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	116		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	111		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	91		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	109		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	82		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	106		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	108		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	118		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	114		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	76		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	107		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	114		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	114		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	117		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	108		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	104		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	109		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	111		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	107		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	107		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	101		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	114		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: 1400470

Reported: 07/08/13 at 07:48 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>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	107		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	104		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	103		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	100		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	110		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Styrene	N.D.	0.1	0.5	ug/l	111		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	112		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	102		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	112		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	103		65-131		
Toluene	N.D.	0.1	0.5	ug/l	108		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	86		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	90		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	111		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	110		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	112		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	99		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	107		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	89		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	108		80-120		

Batch number: 13179WAE026	Sample number(s): 7110837-7110848								
Acenaphthene	N.D.	0.010	0.050	ug/l	100	101	65-124	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	106	107	72-113	2	30
Anthracene	N.D.	0.010	0.050	ug/l	99	101	70-117	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	92	94	75-115	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	101	104	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	114	112	74-130	1	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	84	106	63-121	22	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	103	104	74-118	1	30
Chrysene	N.D.	0.010	0.050	ug/l	99	100	75-112	2	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	76	88	66-122	14	30
Fluoranthene	N.D.	0.010	0.050	ug/l	94	93	73-116	1	30
Fluorene	N.D.	0.010	0.050	ug/l	97	97	74-115	0	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	84	99	66-122	16	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	104	105	72-114	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98	99	74-119	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	100	103	67-118	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	102	103	72-109	2	30
Pyrene	N.D.	0.010	0.050	ug/l	91	96	71-116	6	30

Batch number: 131791848001	Sample number(s): 7110837-7110848								
Arsenic	N.D.	0.0068	0.0200	mg/l	101		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Calcium	0.0526 J	0.0334	0.200	mg/l	104		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	107		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	101		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	105		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	95		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	102		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: 1400470

Reported: 07/08/13 at 07:48 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: 131795713001	Sample number(s): 7110837-7110848								
Mercury	N.D.	0.00006	0.00020	mg/l	101		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: C131821AA	Sample number(s): 7110837-7110849 UNSPK: 7110837								
Acetone	98	110	57-163	11	30				
Allyl Chloride	88	90	67-139	2	30				
Benzene	101	104	87-126	3	30				
Bromobenzene	98	101	80-123	3	30				
Bromochloromethane	121	121	82-125	0	30				
Bromodichloromethane	102	103	82-133	1	30				
Bromoform	113	117	60-138	4	30				
Bromomethane	98	101	41-145	3	30				
2-Butanone	87	94	63-146	7	30				
n-Butylbenzene	98	100	83-131	2	30				
sec-Butylbenzene	99	102	84-128	3	30				
tert-Butylbenzene	99	103	84-135	4	30				
Carbon Tetrachloride	114	116	81-148	2	30				
Chlorobenzene	107	109	78-133	2	30				
Chloroethane	94	97	70-139	4	30				
Chloroform	104	106	86-136	2	30				
Chloromethane	83	86	55-152	4	30				
2-Chlorotoluene	98	102	81-120	4	30				
4-Chlorotoluene	100	104	82-119	3	30				
1,2-Dibromo-3-chloropropane	94	101	43-143	7	30				
Dibromochloromethane	109	110	79-125	2	30				
1,2-Dibromoethane	103	105	84-127	2	30				
Dibromomethane	101	102	83-126	2	30				
1,2-Dichlorobenzene	101	104	83-117	3	30				
1,3-Dichlorobenzene	100	103	81-118	3	30				
1,4-Dichlorobenzene	100	103	79-120	3	30				
Dichlorodifluoromethane	77	76	28-136	1	30				
1,1-Dichloroethane	98	101	88-136	3	30				
1,2-Dichloroethane	102	103	82-135	1	30				
1,1-Dichloroethene	110	114	83-150	4	30				
cis-1,2-Dichloroethene	102	105	82-129	3	30				
trans-1,2-Dichloroethene	108	110	88-127	3	30				
Dichlorofluoromethane	122	126	59-176	3	30				
1,2-Dichloropropane	102	105	91-126	4	30				
1,3-Dichloropropane	97	99	80-127	2	30				
2,2-Dichloropropane	103	108	80-134	4	30				
1,1-Dichloropropene	107	110	86-139	3	30				
cis-1,3-Dichloropropene	90	95	74-132	6	30				
trans-1,3-Dichloropropene	95	99	71-128	4	30				
Ethyl ether	96	96	67-127	0	30				

*- Outside of specification

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

Quality Control SummaryClient Name: ExxonMobil
Reported: 07/08/13 at 07:48 PM

Group Number: 1400470

Sample Matrix Quality ControlUnspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup</u> <u>RPD</u> <u>Max</u>
Ethylbenzene	101	104	80-140	3	30			
Freon 113	113	113	87-158	0	30			
Hexachlorobutadiene	96	100	65-128	4	30			
Isopropylbenzene	102	104	81-133	2	30			
p-Isopropyltoluene	98	101	84-124	3	30			
Methyl Tertiary Butyl Ether	90	95	82-132	5	30			
4-Methyl-2-Pentanone	91	95	69-149	4	30			
Methylene Chloride	106	107	84-122	1	30			
n-Propylbenzene	98	101	79-131	3	30			
Styrene	106	107	63-151	1	30			
1,1,1,2-Tetrachloroethane	106	109	87-126	3	30			
1,1,2,2-Tetrachloroethane	97	98	75-131	1	30			
Tetrachloroethene	108	110	75-129	2	30			
Tetrahydrofuran	95	96	56-154	1	30			
Toluene	104	107	83-127	3	30			
1,2,3-Trichlorobenzene	80	83	73-125	3	30			
1,2,4-Trichlorobenzene	82	86	77-120	4	30			
1,1,1-Trichloroethane	106	109	85-140	3	30			
1,1,2-Trichloroethane	105	106	85-129	1	30			
Trichloroethene	106	110	85-131	3	30			
Trichlorofluoromethane	107	105	67-161	1	30			
1,2,3-Trichloropropane	100	99	76-120	0	30			
1,2,4-Trimethylbenzene	99	102	87-126	3	30			
1,3,5-Trimethylbenzene	99	102	89-129	3	30			
Vinyl Chloride	92	96	65-151	4	30			
Xylene (Total)	104	105	81-137	1	30			

Batch number: 131791848001	Sample number(s): 7110837-7110848 UNSPK: P104191 BKG: P104191							
Arsenic	102	103	81-123	1	20	N.D.	N.D.	0 (1) 20
Barium	103	101	78-118	2	20	0.0155	0.0150	3 (1) 20
Cadmium	102	102	83-116	0	20	N.D.	N.D.	0 (1) 20
Calcium	98	98	81-118	0	20	5.01	4.85	3 20
Chromium	104	101	81-120	3	20	N.D.	N.D.	0 (1) 20
Lead	105	105	75-125	0	20	N.D.	N.D.	0 (1) 20
Magnesium	96	95	75-125	0	20	2.31	2.24	3 20
Nickel	105	104	86-115	1	20	N.D.	N.D.	0 (1) 20
Selenium	102	102	75-125	1	20	N.D.	N.D.	0 (1) 20
Silver	96	93	75-125	3	20	N.D.	N.D.	0 (1) 20
Vanadium	103	100	90-111	3	20	N.D.	N.D.	0 (1) 20

Batch number: 131795713001	Sample number(s): 7110837-7110848 UNSPK: 7110840 BKG: 7110840							
Mercury	99	99	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: BTEX 25-ml purge

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: ExxonMobil

Group Number: 1400470

Reported: 07/08/13 at 07:48 PM

Surrogate Quality Control

Batch number: C131821AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7110837	107	105	98	94
7110838	107	106	98	94
7110839	108	105	98	95
7110840	108	105	98	94
7110841	108	106	97	94
7110842	108	105	98	93
7110843	108	104	96	93
7110844	108	107	97	94
7110845	109	105	96	93
7110846	109	106	98	94
7110847	109	105	97	93
7110848	108	106	96	92
7110849	107	104	98	96
Blank	106	103	97	94
LCS	103	104	100	100
MS	105	103	101	100
MSD	105	103	101	100
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13179WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7110837	81	57*	100
7110838	79	69	98
7110839	76	62	95
7110840	75	56*	95
7110841	85	66	93
7110842	76	80	95
7110843	62*	52*	76
7110844	60*	50*	80
7110845	42*	30*	57*
7110846	76	46*	92
7110847	85	63	96
7110848	74	66	90
Blank	80	99	98
LCS	85	100	101
LCSD	82	103	102
Limits:	64-120	62-141	58-134

*- Outside of specification

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

eurofins

Acct. # 14739

For Eurofins Lancaster Laboratories use only
Group # 1900470 Sample # 7110837-49
Instructions on reverse side correspond with circled numbers.

1 of 1

1 Client Information										4 Matrix		5 Analyses Requested										6 Remarks					
Facility #/SID MAYFLOWER PIPELINE INCIDENT										Sediment ☐ Ground ☐ Potable ☐ NPDES ☐ Water ☐ Air ☐ Oil ☐		Preservation Code										SCR#:					
Site Address MAYFLOWER, AR.																						Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other					
ExxonMobil PM SCOTT BUSHROE										Cost Center/AFE		Total # of Containers VOC'S 82603 PAH'S 8270 SIM PCRA Metals + Ni, Pb, V, Mn, Zn										6					
Consultant/Office ARCADIS-US										Consultant Phone # (919) 302-6799																	
Consultant PM STEVE BARRICK																											
Sampler J. WALDRON / B. NICHALSON										3																	
2 Sample Identification										Collected		Grab		Composite													
										Date		Time															
WS-003 (SURFACE) 062713										6/27/13		0850		X													
WS-002 (SURFACE) 062713										6/27/13		0920		X													
WS-005 (SURFACE) 062713										6/27/13		0950		X													
WS-001 (SURFACE) 062713										6/27/13		1040		X													
WS-001 (0.5-1.0) 062713										6/27/13		1050		X													
WS-004 (SURFACE) 062713										6/27/13		1110		X													
WS-004 (0.5-1.0) 062713										6/27/13		1120		X													
WS-007 (SURFACE) 062713										6/27/13		1140		X													
WS-007 (0.5-1.0) 062713										6/27/13		1150		X													
WS-006 (SURFACE) 062713										6/27/13		1210		X													
WS-006 (0.5-1.0) 062713										6/27/13		1220		X													
DUP-WS-47-062713										6/27/13				X													
7 Turnaround Time Requested (TAT) (please circle)										Relinquished by		Date		Time		Received by		Date		Time							
Standard 5 day 4 day												6/27/13		1600													
72 hour 48 hour 24 hour										Relinquished by		Date		Time		Received by		Date		Time							
										Relinquished by		Date		Time		Received by		Date		Time							
8 Data Package (circle if required)										Relinquished by Commercial Carrier		Date		Time		Received by		Date		Time							
Type I - Full										UPS						Branch		6-28-13		925							
Type VI (Raw Data)										FedEx																	
NJ Reduced										Other																	
Other																											
EDD (circle if required)										Locus EIM (default)		Temperature Upon Receipt 10-1.1 °C		Custody Seals Intact?		Yes		No									
Other																											

**Lancaster
Laboratories**

Acct. # 14739

For Eurofins Lancaster Laboratories use only

For Eurofins Lancaster Laboratories use only
Group # 1400470 Sample # 7110837-49

Instructions on reverse side correspond with circled numbers

2 of 2

[illegible]

Issued by Dept. 40 Management

7053 0413

Environmental Sample Administration
Receipt Documentation Log

1400470

Client/Project: Exxon mobilShipping Container Sealed: YES NODate of Receipt: 6-28-13Custody Seal Present * : YES NOTime of Receipt: 925* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 50-1Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	07121	1.0	TB	WI	X	B	
2	↓	1.1	↓	↓	↓	↓	
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#:

Burachy Barclay 2299

Date/Time:

6-28-13 950

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
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 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.		

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

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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