ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

June 03, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/01/2013
Group Number: 1394023
SDG: PEH93
PO Number: 4510076246
Release Number: MAYFLOWER 1406
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LLI) #
WS-004(0.5-1.0)053113 Grab Surface Water	7077915
WS-004(0.5-1.0)053113 Filtered Grab Surface Water	7077916
WS-007(0.5-1.0)053113 Grab Surface Water	7077917
WS-007(0.5-1.0)053113 Filtered Grab Surface Water	7077918
WS-TB-61-053113 Water	7077919
WS-FB-35-053113 Filtered Grab Water	7077920

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer
ELECTRONIC COPY TO	ARCADIS	Attn: Rhiannon Parmalee
ELECTRONIC COPY TO	ARCADIS	Attn: Jamie Pritchard
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael L Sixsmith
ELECTRONIC COPY TO	ExxonMobil	Attn: Julie Foster
ELECTRONIC	ExxonMobil	Attn: Carl Wideman

COPY TO

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1394023

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 #: 13152WAE026 (Sample number(s): 7077915-7077918, 7077920 UNSPK: P77925)

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

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7077915, 7077918, MSD

Sample #s: 7077915, 7077918

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

SW-846 6010B, Metals

Batch #: 131521848002 (Sample number(s): 7077915-7077918, 7077920 UNSPK: 7077917 BKG: 7077917)

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

SW-846 6010B, Metals Dissolved

Batch #: 131521848002 (Sample number(s): 7077915-7077918, 7077920 UNSPK: 7077917 BKG: 7077917)

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

Sample Description: WS-004(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077915
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:20 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

04510 SDG#: PEH93-01

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	Acetone	67-64-1	4.0	J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.		0.1	0.5	1
02898	Benzene	71-43-2	N.D.		0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.		0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.		0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.		0.1	0.5	1
02898	Bromoform	75-25-2	N.D.		0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.		0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.		1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.		0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.		0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.		0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.		0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.		0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.		0.1	0.5	1
02898	Chloroform	67-66-3	N.D.		0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.		0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.		0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.		0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.		0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.		0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.		0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.		0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.		0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.		0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.		0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.		0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.		0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.		0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.		0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.		0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.		0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.		0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.		0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.		0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.		0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.		0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.		0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.		0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.		0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.		0.1	0.5	1
02898	Freon 113	76-13-1	N.D.		0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.		0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.		0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.		0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.		0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.		1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.		0.2	0.5	1

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

Sample Description: WS-004(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077915
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:20 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

04510 SDG#: PEH93-01

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

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.1	0.064	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0116 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.107	0.00033	0.0050	1

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

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Analysis Report

Sample Description: WS-004(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077915
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:20 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

04510 SDG#: PEH93-01

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.	0.00036	0.0050	1
01750	Calcium	7440-70-2	4.15	0.0640	0.200	1
07051	Chromium	7440-47-3	0.0136 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0141 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	2.61	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0116	0.0011	0.0100	1
07036	Selenium	7782-49-2	0.0089 J	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0205	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131541AA	06/03/2013 10:30	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131541AA	06/03/2013 10:30	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13152WAE026	06/03/2013 04:49	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13152WAE026	06/02/2013 14:00	Elaine F Stoltzfus	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131546256001	06/03/2013 04:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131521848002	06/02/2013 18:46	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131525713001	06/01/2013 14:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131521848002	06/01/2013 11:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131525713001	06/01/2013 11:55	Damary Valentin	1

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

Sample Description: WS-004(0.5-1.0)053113 Filtered Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077916
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:20 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

F4510 SDG#: PEH93-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
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	0.012 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.026 J	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 Dissolved	**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	0.0253	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
07061	Nickel	7440-02-0	0.0027 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0017 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

This sample was field filtered for dissolved PAHs and metals.

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
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13152WAE026	06/03/2013 05:17	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13152WAE026	06/02/2013 14:00	Elaine F Stoltzfus	1

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

Sample Description: WS-004(0.5-1.0)053113 Filtered Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077916
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:20 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

F4510 SDG#: PEH93-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131521848002	06/02/2013 18:50	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131525713001	06/01/2013 14:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131521848002	06/01/2013 11:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131525713001	06/01/2013 11:55	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077917
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:50 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

07510 SDG#: PEH93-03

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

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

Sample Description: WS-007(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077917
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:50 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

07510 SDG#: PEH93-03

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	N.D.		0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.1	J	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.051	1
08357	Anthracene	120-12-7	0.025	J	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	0.016	J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.051	1
08357	Chrysene	218-01-9	0.022	J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.051	1
08357	Fluoranthene	206-44-0	0.062		0.010	0.051	1
08357	Fluorene	86-73-7	N.D.		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.		0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.031	0.051	1
08357	Pyrene	129-00-0	0.13		0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	12.2		0.064	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0701		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00036	0.0050	1
01750	Calcium	7440-70-2	2.22		0.0640	0.200	1

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

Sample Description: WS-007(0.5-1.0)053113 Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077917
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:50 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

07510 SDG#: PEH93-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	0.0087 J	0.0011	0.0150	1
07055	Lead	7439-92-1	0.0094 J	0.0051	0.0150	1
01757	Magnesium	7439-95-4	1.60	0.0606	0.100	1
07061	Nickel	7440-02-0	0.0075 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0140	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131541AA	06/03/2013 10:52	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131541AA	06/03/2013 10:52	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13152WAE026	06/03/2013 05:44	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13152WAE026	06/02/2013 14:00	Elaine F Stoltzfus	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	131546256001	06/03/2013 04:33	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131521848002	06/02/2013 18:26	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131525713001	06/01/2013 14:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131521848002	06/01/2013 11:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131525713001	06/01/2013 11:55	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)053113 Filtered Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077918
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:50 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

F7510 SDG#: PEH93-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The 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 Dissolved	**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	0.0151	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
07061	Nickel	7440-02-0	0.0022 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	0.0014 J	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

This sample was field filtered for dissolved PAHs and metals.

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
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13152WAE026	06/03/2013 06:11	Brian K Graham	1

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

Sample Description: WS-007(0.5-1.0)053113 Filtered Grab Surface Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077918
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 12:50 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

F7510 SDG#: PEH93-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13152WAE026	06/02/2013 14:00	Elaine F Stoltzfus	1
07035	Arsenic	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	131521848002	06/02/2013 19:00	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131525713001	06/01/2013 14:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131521848002	06/01/2013 11:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131525713001	06/01/2013 11:55	Damary Valentin	1

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

Sample Description: WS-TB-61-053113 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077919
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

TB61- SDG#: PEH93-05TB

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

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

Sample Description: WS-TB-61-053113 Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077919
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

TB61- SDG#: PEH93-05TB

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C131541AA	06/03/2013 11:15	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C131541AA	06/03/2013 11:15	Kerri E Legerlotz	1

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

Sample Description: WS-FB-35-053113 Filtered Grab Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077920
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 13:30 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

FB35- SDG#: PEH93-06FB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
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 Dissolved	**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	0.0011 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00036	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0011	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0051	0.0150	1
07061	Nickel	7440-02-0	0.0011 J	0.0011	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0075	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0012	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0013	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000070	0.00020	1

General Sample Comments

This sample was field filtered for dissolved PAHs and metals.

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
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13152WAE026	06/03/2013 06:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13152WAE026	06/02/2013 14:00	Elaine F Stoltzfus	1

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

Sample Description: WS-FB-35-053113 Filtered Grab Water
Mayflower, AR
Pipeline Incident

LLI Sample # WW 7077920
LLI Group # 1394023
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 05/31/2013 13:30 by TM

Submitted: 06/01/2013 09:30
Reported: 06/03/2013 14:33

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

FB35- SDG#: PEH93-06FB*

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	131521848002	06/02/2013 21:58	Tara L Snyder	1
07046	Barium	SW-846 6010B	2	131521848002	06/02/2013 21:58	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	2	131521848002	06/02/2013 21:58	Tara L Snyder	1
07051	Chromium	SW-846 6010B	2	131521848002	06/02/2013 21:58	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	131521848002	06/02/2013 21:58	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	131521848002	06/02/2013 21:58	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	131521848002	06/02/2013 21:58	Tara L Snyder	1
07066	Silver	SW-846 6010B	2	131521848002	06/02/2013 21:58	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	2	131521848002	06/02/2013 21:58	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	131525713001	06/01/2013 14:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	131521848002	06/01/2013 11:11	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	131525713001	06/01/2013 11:55	Damary Valentin	1

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1394023
Reported: 06/03/13 at 02:33 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: C131541AA	Sample number(s): 7077915,7077917,7077919								
Acetone	N.D.	3.0	5.0	ug/l	110		73-135		
Allyl Chloride	N.D.	0.1	0.5	ug/l	92		61-130		
Benzene	N.D.	0.1	0.5	ug/l	104		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	108		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	105		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	120		63-132		
Bromomethane	N.D.	0.1	0.5	ug/l	94		38-146		
2-Butanone	N.D.	1.0	5.0	ug/l	101		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	113		74-133		
Chlorobenzene	N.D.	0.1	0.5	ug/l	109		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	91		67-124		
Chloroform	N.D.	0.1	0.5	ug/l	105		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	79		55-135		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	114		57-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	114		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	104		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	105		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-112		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	67		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	103		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	112		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	105		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	116		63-149		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	105		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	102		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	107		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	105		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	102		74-120		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		73-126		
Ethyl ether	N.D.	0.1	0.5	ug/l	89		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	114		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	100		61-125		

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1394023
Reported: 06/03/13 at 02:33 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	101		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	94		80-125		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	94		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	107		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Styrene	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	109		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	97		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	111		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	106		65-131		
Toluene	N.D.	0.1	0.5	ug/l	104		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	91		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	107		79-127		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	96		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	100		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	85		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	105		80-120		
Batch number: 13152WAE026	Sample number(s): 7077915-7077918,7077920								
Acenaphthene	N.D.	0.0025	0.013	ug/l	103		65-124		
Acenaphthylene	N.D.	0.0025	0.013	ug/l	110		72-113		
Anthracene	N.D.	0.0025	0.013	ug/l	108		70-117		
Benzo(a)anthracene	N.D.	0.0025	0.013	ug/l	111		75-115		
Benzo(a)pyrene	N.D.	0.0025	0.013	ug/l	101		72-120		
Benzo(b)fluoranthene	N.D.	0.0025	0.013	ug/l	113		74-130		
Benzo(g,h,i)perylene	N.D.	0.0025	0.013	ug/l	98		63-121		
Benzo(k)fluoranthene	N.D.	0.0025	0.013	ug/l	108		74-118		
Chrysene	N.D.	0.0025	0.013	ug/l	106		75-112		
Dibenz(a,h)anthracene	N.D.	0.0025	0.013	ug/l	98		66-122		
Fluoranthene	N.D.	0.0025	0.013	ug/l	105		73-116		
Fluorene	N.D.	0.0025	0.013	ug/l	105		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.0025	0.013	ug/l	105		66-122		
1-Methylnaphthalene	N.D.	0.0025	0.013	ug/l	113		72-114		
2-Methylnaphthalene	N.D.	0.0025	0.013	ug/l	114		74-119		
Naphthalene	N.D.	0.0075	0.013	ug/l	102		67-118		
Phenanthrene	N.D.	0.0075	0.013	ug/l	100		72-109		
Pyrene	N.D.	0.0025	0.013	ug/l	107		71-116		
Batch number: 131521848002	Sample number(s): 7077915-7077918,7077920								
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00036	0.0050	mg/l	103		90-112		
Calcium	N.D.	0.0640	0.200	mg/l	101		90-110		
Chromium	N.D.	0.0011	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0051	0.0150	mg/l	105		88-110		
Magnesium	N.D.	0.0606	0.100	mg/l	98		90-110		
Nickel	N.D.	0.0011	0.0100	mg/l	105		90-111		
Selenium	N.D.	0.0075	0.0200	mg/l	99		80-120		
Silver	N.D.	0.0012	0.0050	mg/l	116		80-120		
Vanadium	N.D.	0.0013	0.0050	mg/l	103		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: 1394023
Reported: 06/03/13 at 02:33 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 131525713001	Sample number(s): 7077915-7077918,7077920								
Mercury	N.D.	0.00007 0	0.00020	mg/l	90		80-120		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: C131541AA	Sample number(s): 7077915,7077917,7077919 UNSPK: 7077915								
Acetone	96	99	57-163	3	30				
Allyl Chloride	84	91	67-139	8	30				
Benzene	93	96	87-126	4	30				
Bromobenzene	94	99	80-123	6	30				
Bromochloromethane	97	100	82-125	3	30				
Bromodichloromethane	94	97	82-133	3	30				
Bromoform	111	114	60-138	3	30				
Bromomethane	93	99	41-145	7	30				
2-Butanone	84	86	63-146	1	30				
n-Butylbenzene	93	98	83-131	5	30				
sec-Butylbenzene	94	100	84-128	6	30				
tert-Butylbenzene	97	103	84-135	6	30				
Carbon Tetrachloride	101	105	81-148	3	30				
Chlorobenzene	99	104	78-133	5	30				
Chloroethane	91	98	70-139	8	30				
Chloroform	94	98	86-136	4	30				
Chloromethane	78	85	55-152	9	30				
2-Chlorotoluene	94	101	81-120	7	30				
4-Chlorotoluene	97	103	82-119	6	30				
1,2-Dibromo-3-chloropropane	93	97	43-143	3	30				
Dibromochloromethane	104	107	79-125	3	30				
1,2-Dibromoethane	94	96	84-127	3	30				
Dibromomethane	94	96	83-126	2	30				
1,2-Dichlorobenzene	96	102	83-117	6	30				
1,3-Dichlorobenzene	96	103	81-118	6	30				
1,4-Dichlorobenzene	96	102	79-120	6	30				
Dichlorodifluoromethane	65	66	28-136	2	30				
1,1-Dichloroethane	92	96	88-136	5	30				
1,2-Dichloroethane	91	96	82-135	4	30				
1,1-Dichloroethene	102	107	83-150	4	30				
cis-1,2-Dichloroethene	94	97	82-129	3	30				
trans-1,2-Dichloroethene	97	100	88-127	3	30				
Dichlorofluoromethane	115	123	59-176	7	30				
1,2-Dichloropropane	94	100	91-126	6	30				
1,3-Dichloropropane	93	96	80-127	3	30				
2,2-Dichloropropane	95	99	80-134	4	30				
1,1-Dichloropropene	95	99	86-139	3	30				
cis-1,3-Dichloropropene	90	95	74-132	6	30				
trans-1,3-Dichloropropene	89	93	71-128	4	30				
Ethyl ether	86	86	67-127	0	30				

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1394023
Reported: 06/03/13 at 02:33 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Ethylbenzene	95	99	80-140	4	30				
Freon 113	103	103	87-158	0	30				
Hexachlorobutadiene	91	96	65-128	6	30				
Isopropylbenzene	96	101	81-133	5	30				
p-Isopropyltoluene	95	101	84-124	6	30				
Methyl Tertiary Butyl Ether	84	88	82-132	4	30				
4-Methyl-2-Pentanone	92	96	69-149	4	30				
Methylene Chloride	95	97	84-122	3	30				
n-Propylbenzene	92	98	79-131	6	30				
Styrene	98	103	63-151	5	30				
1,1,1,2-Tetrachloroethane	98	105	87-126	7	30				
1,1,2,2-Tetrachloroethane	93	98	75-131	5	30				
Tetrachloroethene	100	103	75-129	3	30				
Tetrahydrofuran	85	81	56-154	5	30				
Toluene	95	100	83-127	5	30				
1,2,3-Trichlorobenzene	87	92	73-125	5	30				
1,2,4-Trichlorobenzene	87	92	77-120	6	30				
1,1,1-Trichloroethane	96	101	85-140	5	30				
1,1,2-Trichloroethane	98	101	85-129	3	30				
Trichloroethene	96	100	85-131	4	30				
Trichlorofluoromethane	95	99	67-161	4	30				
1,2,3-Trichloropropane	96	100	76-120	4	30				
1,2,4-Trimethylbenzene	94	99	87-126	6	30				
1,3,5-Trimethylbenzene	93	100	89-129	7	30				
Vinyl Chloride	86	92	65-151	6	30				
Xylene (Total)	97	101	81-137	5	30				
Batch number: 13152WAE026	Sample number(s): 7077915-7077918,7077920 UNSPK: P077925								
Acenaphthene	102	90	59-127	12	30				
Acenaphthylene	111	98	33-146	11	30				
Anthracene	103	87	69-119	17	30				
Benzo(a)anthracene	115	78	67-124	38*	30				
Benzo(a)pyrene	84	43*	64-123	63*	30				
Benzo(b)fluoranthene	97	50*	61-133	63*	30				
Benzo(g,h,i)perylene	79	38	36-138	70*	30				
Benzo(k)fluoranthene	86	44*	59-128	63*	30				
Chrysene	91	58*	62-118	44*	30				
Dibenz(a,h)anthracene	79	37	32-141	73*	30				
Fluoranthene	102	80	65-123	24	30				
Fluorene	106	92	69-124	14	30				
Indeno(1,2,3-cd)pyrene	81	39	29-143	69*	30				
1-Methylnaphthalene	113	101	67-117	11	30				
2-Methylnaphthalene	115	102	71-126	12	30				
Naphthalene	107	97	58-131	10	30				
Phenanthrene	100	84	67-117	17	30				
Pyrene	115	89	59-125	25	30				
Batch number: 131521848002	Sample number(s): 7077915-7077918,7077920 UNSPK: 7077917 BKG: 7077917								
Arsenic	106	106	81-123	0	20	N.D.	0.0075 J	200* (1)	20
Barium	105	105	78-118	0	20	0.0701	0.0717	2	20
Cadmium	103	103	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	102	103	81-118	0	20	2.22	2.24	1	20

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1394023
Reported: 06/03/13 at 02:33 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Chromium	106	106	81-120	0	20	0.0087 J	0.0096 J	10 (1)	20
Lead	103	103	75-125	0	20	0.0094 J	0.0101 J	6 (1)	20
Magnesium	118	119	75-125	1	20	1.60	1.67	4	20
Nickel	106	106	86-115	0	20	0.0075 J	0.0078 J	4 (1)	20
Selenium	103	99	75-125	4	20	N.D.	N.D.	0 (1)	20
Silver	117	118	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	106	106	90-111	0	20	0.0140	0.0141	0 (1)	20
Batch number: 131525713001	Sample number(s): 7077915-7077918,7077920 UNSPK: 7077918 BKG: 7077918								
Mercury	99	98	80-120	1	20	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: NHDES VOCs 25ml purge
Batch number: C131541AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7077915	105	103	100	95
7077917	105	104	100	97
7077919	107	105	100	95
Blank	106	103	100	95
LCS	103	102	102	99
MS	103	102	102	99
MSD	103	102	102	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13152WAE026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7077915	60*	34*	83
7077916	83	73	97
7077917	79	70	91
7077918	81	49*	94
7077920	99	99	100
Blank	91	107	93
LCS	99	111	108
MS	99	98	107
MSD	75	44*	94
Limits:	64-120	62-141	58-134

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

Quality Control Summary

Client Name: ExxonMobil Group Number: 1394023
Reported: 06/03/13 at 02:33 PM

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

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 For Eurofins Lancaster Laboratories use only Group # 1394023 Sample # 7077915-20
Instructions on reverse side correspond with circled numbers.

PS 1 of 1

1 Client Information

Facility #/SID: MayFlower Pipeline Incident
Site Address: MayFlower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: ARCADIS-US
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Tyler Milburn / Hans Van Aller

4 Matrix

Sediment ☐ Ground ☐ Surface ☑
Soil ☐ Potable ☐ NPDES ☐ Water ☑ Air ☐ Oil ☐

5 Analyses Requested

Preservation Code: H | | N | | N

SCR#:

Preservation Codes

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

6 Remarks

Data Analysis Questions: Lyndi Matt/ARCADIS

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals + Ni, V, Ca, Mg hardness	Filtered PAH 8270SIM	Filtered Ni, V, Ca, Mg, hardness RCRA Metals +
WS-004(0.5-1.0)053113	5/31/13	1220	✓		9	✓	✓	✓	✓	✓
WS-007(0.5-1.0)053113	↓	1250	✓		9	✓	✓	✓	✓	✓
WS-TB-61-053113		—	✓		2	✓				
WS-FB-35-053113	↓	1330	✓		3				✓	✓

7 Turnaround Time Requested (TAT) (please circle)

Standard 5 day 4 day
72 hour 48 hour (24 hour)

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
Lyndi Miller	5/31/13	1530			
Relinquished by Commercial Carrier: UPS ____ FedEx ✓ Other ____			Received by	6/1/13	0930

Temperature Upon Receipt 1.5 °C

Custody Seals Intact? (Yes) No

9

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GT# 1394023

Environmental Sample Administration Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 6/1/13

Time of Receipt: 0930

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	2.0	TB	WI	Y	B	5-5 SW
2	↓	1.5	↓	↓	↓	↓	5-0 SW
3	↓	0.3	↓	↓	↓	↓	Res. Soil
4	↓	2.2	↓	↓	↓	↓	FT
5	↓	2.0	↓	↓	↓	↓	VB + FT
6	↓	0.4	↓	↓	↓	↓	5-5 SW

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 964 **Date/Time:** 6/1/13 1035

Issued by Dept. 6042 Management

2174.06

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GT# 1394023

Environmental Sample Administration
Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 6/1/13

Time of Receipt: 0930

Source Code: 50

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	0.8	TB	WI	Y	B	Res Soil
2							
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 964 **Date/Time:** 6/1/13 1035

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

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

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	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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