ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

October 24, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/17/2013
Group Number: 1426979
SDG: PEM25
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)101613 Grab Surface Water	7239790
WS-014(5.5-6.0)101613 Grab Surface Water	7239791
WS-012(1.5-2.0)101613 Grab Surface Water	7239792
WS-012(5.0-5.5)101613 Grab Surface Water	7239793
WS-010(1.5-2.0)101613 Grab Surface Water	7239794
WS-010(3.5-4.0)101613 Grab Surface Water	7239795
WS-006(0.5-1.0)101613 Grab Surface Water	7239796
WS-005(Surface)101613 Grab Surface Water	7239797
WS-011(1.5-2.0)101613 Grab Surface Water	7239798
WS-011(5.5-6.0)101613 Grab Surface Water	7239799
WS-002(Surface)101613 Grab Surface Water	7239800
WS-018(Surface)101613 Grab Surface Water	7239801
WS-003(Surface)101613 Grab Surface Water	7239802
WS-007(0.5-1.0)101613 Grab Surface Water	7239803
WS-001(0.5-1.0)101613 Grab Surface Water	7239804
DUP-WS-103-101613 Grab Surface Water	7239805
WS-EB-93-101613 Grab Water	7239806
WS-TB-178-101613 Water	7239807

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1426979

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

Sample #s: 7239790, 7239791, 7239792, 7239793, 7239794, 7239795, 7239796, 7239797, 7239798, 7239799, 7239800, 7239801, 7239802, 7239803, 7239804, 7239805, 7239806
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

EPA 1664A, Wet Chemistry

Batch #: 13296807902A (Sample number(s): 7239790-7239805 UNSPK: 7239791)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: HEM (oil & grease)

Sample Description: WS-014(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239790
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16141 SDG#: PEM25-01

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

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

Sample Description: WS-014(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239790
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16141 SDG#: PEM25-01

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.0	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	0.0332	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239790
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16141 SDG#: PEM25-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.85	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	2.41	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 12:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 12:36	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 05:22	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:17	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239790
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16141 SDG#: PEM25-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239791
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16142 SDG#: PEM25-02

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

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

Sample Description: WS-014(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239791
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16142 SDG#: PEM25-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.9	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	0.0334	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239791
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16142 SDG#: PEM25-02

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.82		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	2.39		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.6	J	1.4	5.0	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	I132911AA	10/18/2013 12:57	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 12:57	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 05:52	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:21	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239791
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16142 SDG#: PEM25-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239792
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16121 SDG#: PEM25-03

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

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

Sample Description: WS-012(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239792
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16121 SDG#: PEM25-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.6	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	0.0309	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-012(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239792
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16121 SDG#: PEM25-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.00	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	2.45	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 13:18	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 13:18	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 06:21	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:33	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239792
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16121 SDG#: PEM25-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239793
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16122 SDG#: PEM25-04

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

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

Sample Description: WS-012(5.0-5.5)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239793
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16122 SDG#: PEM25-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.3	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	0.0318	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-012(5.0-5.5)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239793
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16122 SDG#: PEM25-04

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.93		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	2.42		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.7	J	1.4	5.0	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	I132911AA	10/18/2013 13:39	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 13:39	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 06:50	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:37	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239793
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 08:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16122 SDG#: PEM25-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239794
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16101 SDG#: PEM25-05

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

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

Sample Description: WS-010(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239794
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16101 SDG#: PEM25-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.8	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	0.0351	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239794
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16101 SDG#: PEM25-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.05	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 14:00	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 14:00	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 07:20	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:42	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239794
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16101 SDG#: PEM25-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239795
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16102 SDG#: PEM25-06

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

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

Sample Description: WS-010(3.5-4.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239795
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16102 SDG#: PEM25-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	23.3	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	0.0367	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(3.5-4.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239795
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16102 SDG#: PEM25-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.15	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	2.53	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 14:22	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 14:22	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 07:49	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:46	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239795
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:20 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16102 SDG#: PEM25-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239796
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16006 SDG#: PEM25-07

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

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

Sample Description: WS-006(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239796
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16006 SDG#: PEM25-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.043 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.5	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	0.0329	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-006(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239796
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 09:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16006 SDG#: PEM25-07

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.98		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	2.45		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.2	J	1.4	5.0	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	I132911AA	10/18/2013 15:46	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 15:46	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 21:07	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 03:53	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 08:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239797
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16005 SDG#: PEM25-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	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)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239797
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16005 SDG#: PEM25-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.1 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.050 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.086	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	28.2	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0078 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0429	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-005(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239797
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16005 SDG#: PEM25-08

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**	
01750	Calcium	7440-70-2	6.54		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	2.87		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.8	J	1.4	5.0	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	I132911AA	10/18/2013 16:07	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 16:07	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 21:36	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:50	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:48	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239798
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16111 SDG#: PEM25-09

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

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

Sample Description: WS-011(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239798
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16111 SDG#: PEM25-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.051 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.0	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	0.0373	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-011(1.5-2.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239798
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16111 SDG#: PEM25-09

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.26		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	2.64		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	3.7	J	1.4	5.0	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	I132911AA	10/18/2013 16:28	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 16:28	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 22:06	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:54	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-011(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239799
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16112 SDG#: PEM25-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	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-011(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239799
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16112 SDG#: PEM25-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.033 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	23.3	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	0.0381	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-011(5.5-6.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239799
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 10:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16112 SDG#: PEM25-10

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.13		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	2.55		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.8	J	1.4	5.0	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	I132911AA	10/18/2013 16:50	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 16:50	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 22:35	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 04:58	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239800
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16002 SDG#: PEM25-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	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)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239800
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16002 SDG#: PEM25-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.044 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.2	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	0.0323	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-002(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239800
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:10 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16002 SDG#: PEM25-11

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.90		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	2.43		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.7	J	1.4	5.0	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	I132911AA	10/18/2013 17:11	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 17:11	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 23:04	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-018(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239801
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16018 SDG#: PEM25-12

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

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

Sample Description: WS-018(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239801
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16018 SDG#: PEM25-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.047 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	25.0	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	0.0491	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-018(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239801
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 11:50 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16018 SDG#: PEM25-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.59	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	2.68	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 17:32	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 17:32	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/19/2013 23:34	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:06	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239802
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16003 SDG#: PEM25-13

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

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

Sample Description: WS-003(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239802
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16003 SDG#: PEM25-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.079	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.2	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	0.0445	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-003(Surface)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239802
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16003 SDG#: PEM25-13

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.30		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	2.66		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
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.6	J	1.4	5.0	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	I132911AA	10/18/2013 17:53	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 17:53	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/20/2013 00:03	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:10	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239803
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16007 SDG#: PEM25-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	Acetone	67-64-1	3.9	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)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239803
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16007 SDG#: PEM25-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	23.0	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0101 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0515	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-007(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239803
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 12:40 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16007 SDG#: PEM25-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.31	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0016 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.38	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 18:14	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 18:14	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/20/2013 00:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:22	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239804
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16001 SDG#: PEM25-15

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-001(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239804
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16001 SDG#: PEM25-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.062	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	23.0	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	0.0346	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-001(0.5-1.0)101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239804
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:00 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16001 SDG#: PEM25-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.08	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	2.49	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
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 18:35	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 18:35	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/20/2013 01:02	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:26	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: DUP-WS-103-101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239805
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16103 SDG#: PEM25-16FD

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: DUP-WS-103-101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239805
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16103 SDG#: PEM25-16FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	0.074	0.033	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.5	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	0.0365	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: DUP-WS-103-101613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239805
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16103 SDG#: PEM25-16FD

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium		7440-70-2	4.96	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	2.45	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
Wet Chemistry		**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)		n.a.	N.D.	1.4	5.0	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	I132911AA	10/18/2013 18:57	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 18:57	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/20/2013 01:32	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:31	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13296807902A	10/23/2013 16:49	Michelle L Lalli	1

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

Sample Description: WS-EB-93-101613 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239806
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16E93 SDG#: PEM25-17EB

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-EB-93-101613 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239806
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16E93 SDG#: PEM25-17EB

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.035 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	0.71	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	0.00037 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-EB-93-101613 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239806
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013 13:30 by HVA

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16E93 SDG#: PEM25-17EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	0.222	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	0.0370 J	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	I132911AA	10/18/2013 11:11	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 11:11	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13290WAR026	10/20/2013 02:01	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13290WAR026	10/18/2013 10:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132976256001	10/24/2013 10:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
01750	Calcium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
01757	Magnesium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132901848002	10/24/2013 05:35	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132905713001	10/18/2013 09:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132901848002	10/20/2013 09:36	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132905713001	10/17/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-TB-178-101613 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239807
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16178 SDG#: PEM25-18TB*

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-178-101613 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7239807
LL Group # 1426979
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/16/2013

Submitted: 10/17/2013 09:30
Reported: 10/24/2013 10:20

ExxonMobil c/o Arcadis
630 Plaza Drive, Suite 600
Highlands Ranch CO 80129

16178 SDG#: PEM25-18TB*

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

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	I132911AA	10/18/2013 11:32	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132911AA	10/18/2013 11:32	Jason M Long	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I132911AA	Sample number(s): 7239790-7239807								
Acetone	N.D.	3.0	5.0	ug/l	102		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	94		61-130		
Benzene	N.D.	0.1	0.5	ug/l	92		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	95		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	96		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	103		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	69		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	94		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	95		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	71		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	95		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	67		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	93		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	93		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	92		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	98		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	97		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	97		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	50		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	97		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	100		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	93		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	92		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	93		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	92		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	97		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	91		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	89		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	97		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	94		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	76		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	85		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	101		73-120		

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	89		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	93		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	92		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	103		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	97		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Styrene	N.D.	0.1	0.5	ug/l	90		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	96		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	92		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	86		65-131		
Toluene	N.D.	0.1	0.5	ug/l	88		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	96		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	92		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	78		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	103		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	66		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	89		80-120		
Batch number: 13290WAR026	Sample number(s): 7239790-7239806								
Acenaphthene	N.D.	0.010	0.050	ug/l	101	100	77-118	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	107	106	80-123	1	30
Anthracene	N.D.	0.010	0.050	ug/l	102	101	78-123	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	100	100	73-127	0	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	95	98	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	102	104	79-136	2	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	95	97	64-130	2	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	106	110	73-131	4	30
Chrysene	N.D.	0.010	0.050	ug/l	97	96	76-125	1	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	85	85	58-131	0	30
Fluoranthene	N.D.	0.010	0.050	ug/l	104	104	79-124	0	30
Fluorene	N.D.	0.010	0.050	ug/l	99	98	74-115	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	90	91	62-130	1	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	107	106	80-126	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105	103	81-124	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	104	102	75-120	2	30
Phenanthrene	N.D.	0.030	0.050	ug/l	98	96	75-120	3	30
Pyrene	N.D.	0.010	0.050	ug/l	102	96	71-130	6	30
Batch number: 132901848002	Sample number(s): 7239790-7239806								
Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	102		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	101		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	99		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	99		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	106		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	98		89-110		
Nickel	N.D.	0.0015	0.0100	mg/l	103		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	99		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	90		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	100		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 c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132905713001	Sample number(s): 7239790-7239806								
Mercury	N.D.	0.00006 0	0.00020	mg/l	112		80-120		
Batch number: 13296807902A	Sample number(s): 7239790-7239805								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	92	92	78-114	0	16

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: I132911AA	Sample number(s): 7239790-7239807 UNSPK: 7239790								
Acetone	110	104	57-163	6	30				
Allyl Chloride	100	98	56-160	2	30				
Benzene	100	99	87-126	1	30				
Bromobenzene	97	97	80-123	0	30				
Bromochloromethane	97	96	82-125	1	30				
Bromodichloromethane	98	97	82-133	1	30				
Bromoform	98	98	60-138	1	30				
Bromomethane	71	72	66-130	1	30				
2-Butanone	96	93	56-160	3	30				
n-Butylbenzene	100	99	83-131	1	30				
sec-Butylbenzene	101	101	84-128	0	30				
tert-Butylbenzene	97	108	84-135	10	30				
Carbon Tetrachloride	109	107	81-148	2	30				
Chlorobenzene	97	96	78-133	1	30				
Chloroethane	76	76	70-139	1	30				
Chloroform	101	101	86-136	0	30				
Chloromethane	68	69	49-135	1	30				
2-Chlorotoluene	98	97	75-134	1	30				
4-Chlorotoluene	99	98	76-134	1	30				
1,2-Dibromo-3-chloropropane	95	93	43-143	2	30				
Dibromochloromethane	98	97	79-125	1	30				
1,2-Dibromoethane	95	96	84-127	0	30				
Dibromomethane	98	98	83-126	0	30				
1,2-Dichlorobenzene	99	99	83-117	0	30				
1,3-Dichlorobenzene	102	101	79-132	1	30				
1,4-Dichlorobenzene	101	99	79-120	1	30				
Dichlorodifluoromethane	55	51	28-136	8	30				
1,1-Dichloroethane	102	103	88-136	1	30				
1,2-Dichloroethane	103	102	82-135	1	30				
1,1-Dichloroethene	106	104	83-150	2	30				
cis-1,2-Dichloroethene	98	97	82-129	1	30				
trans-1,2-Dichloroethene	101	100	88-127	1	30				
Dichlorofluoromethane	99	99	81-161	0	30				
1,2-Dichloropropane	103	103	91-126	0	30				
1,3-Dichloropropane	97	97	80-127	1	30				
2,2-Dichloropropane	99	100	80-134	1	30				
1,1-Dichloropropene	101	99	86-139	2	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 c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
cis-1,3-Dichloropropene	95	98	74-132	3	30				
trans-1,3-Dichloropropene	92	92	71-128	0	30				
Ethyl ether	74	75	57-139	2	30				
Ethylbenzene	98	97	80-140	1	30				
Freon 113	104	98	77-147	7	30				
Hexachlorobutadiene	113	113	65-128	0	30				
Isopropylbenzene	98	97	81-133	0	30				
p-Isopropyltoluene	99	99	84-124	1	30				
Methyl Tertiary Butyl Ether	90	92	82-132	1	30				
4-Methyl-2-Pentanone	97	99	69-149	2	30				
Methylene Chloride	101	102	77-135	1	30				
n-Propylbenzene	101	100	79-131	1	30				
Styrene	95	94	63-151	1	30				
1,1,1,2-Tetrachloroethane	100	99	87-126	1	30				
1,1,2,2-Tetrachloroethane	102	99	75-131	2	30				
Tetrachloroethene	102	100	75-129	2	30				
Tetrahydrofuran	85	82	56-154	3	30				
Toluene	95	95	83-127	1	30				
1,2,3-Trichlorobenzene	97	99	73-125	2	30				
1,2,4-Trichlorobenzene	98	99	77-120	1	30				
1,1,1-Trichloroethane	104	103	85-140	1	30				
1,1,2-Trichloroethane	99	98	85-129	0	30				
Trichloroethene	101	100	85-131	0	30				
Trichlorofluoromethane	93	92	73-139	1	30				
1,2,3-Trichloropropane	98	100	76-120	2	30				
1,2,4-Trimethylbenzene	99	98	87-126	1	30				
1,3,5-Trimethylbenzene	99	99	89-129	1	30				
Vinyl Chloride	71	72	62-135	1	30				
Xylene (Total)	96	95	81-137	1	30				
Batch number: 132901848002	Sample number(s): 7239790-7239806 UNSPK: 7239796 BKG: 7239796								
Arsenic	105	103	81-123	2	20	N.D.	N.D.	0 (1)	20
Barium	103	103	78-118	1	20	0.0329	0.0334	1	20
Cadmium	103	102	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	102	97	75-125	2	20	4.98	5.01	1	20
Chromium	102	102	76-120	0	20	N.D.	N.D.	0 (1)	20
Lead	105	105	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	102	98	75-125	2	20	2.45	2.47	1	20
Nickel	105	105	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	104	104	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	92	91	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	102	102	90-117	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132905713001	Sample number(s): 7239790-7239806 UNSPK: 7239799 BKG: 7239799								
Mercury	110	112	80-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 13296807902A	Sample number(s): 7239790-7239805 UNSPK: 7239791								
HEM (oil & grease)	2*		78-114						

*- 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 c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

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
Batch number: I132911AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7239790	103	104	97	95
7239791	105	105	97	95
7239792	104	108	96	95
7239793	105	106	96	95
7239794	104	104	96	95
7239795	105	107	97	97
7239796	103	107	96	96
7239797	104	106	96	95
7239798	104	108	96	96
7239799	105	104	96	95
7239800	105	106	97	94
7239801	105	108	97	96
7239802	104	108	97	96
7239803	105	108	96	96
7239804	104	106	96	95
7239805	105	107	97	95
7239806	103	106	97	95
7239807	103	104	97	95
Blank	103	105	97	96
LCS	104	106	97	98
MS	104	107	97	99
MSD	105	106	97	98
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13290WAR026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7239790	98	84	101
7239791	94	70	102
7239792	96	82	100
7239793	97	79	97
7239794	95	79	100
7239795	98	78	99
7239796	96	74	103
7239797	81	85	103
7239798	87	80	100
7239799	100	70	103
7239800	85	65	103
7239801	91	89	105
7239802	80	83	101
7239803	78	73	104
7239804	87	86	104
7239805	85	82	100
7239806	98	94	104
Blank	99	103	103
LCS	95	101	104

*- 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 c/o Arcadis Group Number: 1426979
Reported: 10/24/13 at 10:20 AM

Surrogate Quality Control

LCSD	95	103	102
Limits:	44-137	62-141	51-136

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

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1426979 Sample # 7239790-807 pg 1 of 2

Instructions on reverse side correspond with circled numbers.

1 Client Information

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

SCR#:

Preservation Codes

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

6 Remarks

Lab to filter and pressure diss. metals upon receipt.

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	4 Matrix: Soil	Water	Oil	Total # of Containers	5 Analyses Requested: VOCs 8260B	PAH 8270 SIM	RCRA Metals + hardness Ni, V, Ca, Mg	Diss Metals	HEM Oil & Grease
WS-014 (1.5-2.0) 101613	10-16-13	820	X			X		9	X	X	X	X	X
WS-014 (5.5-6.0) 101613	10-16-13	830	X			X		9	X	X	X	X	X
WS-012 (1.5-2.0) 101613	10-16-13	840	X			X		9	X	X	X	X	X
WS-012 (5.0-5.5) 101613	10-16-13	850	X			X		9	X	X	X	X	X
WS-010 (1.5-2.0) 101613	10-16-13	910	X			X		9	X	X	X	X	X
WS-010 (3.5-4.0) 101613	10-16-13	920	X			X		9	X	X	X	X	X
WS-006 (0.5-1.0) 101613	10-16-13	940	X			X		9	X	X	X	X	X
WS-005 (surface) 101613	10-16-13	1000	X			X		9	X	X	X	X	X
WS-011 (1.5-2.0) 101613	10-16-13	1040	X			X		9	X	X	X	X	X
WS-011 (5.5-6.0) 101613	10-16-13	1050	X			X		9	X	X	X	X	X
WS-002 (surface) 101613	10-16-13	1110	X			X		9	X	X	X	X	X
WS-018 (surface) 101613	10-16-13	1150	X			X		9	X	X	X	X	X

7 Turnaround Time Requested (TAT) (please circle)

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

8 Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other

Relinquished by	Date	Time	Received by	Date	Time
Daniel Mays	10-16-13	1600			
Relinquished by Commercial Carrier: UPS FedEx Other			Received by	10/17/13	0930

Temperature Upon Receipt 0.7 - 1.7 °C

Custody Seals Intact? Yes No

9

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1426979 Sample # 7239790-807

Instructions on reverse side correspond with circled numbers.

Pg 2 of 2

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: AREADS
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Hans Van Aller / Daniel Mays

SCR#:

4 Matrix

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

5 Analyses Requested

Preservation Code

Preservation Codes

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

6 Remarks

Lab to filter and pressure diss. metals upon receipt

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver)	Diss Metals (Ni, V, Ca, Mg)	HEM Oil & Grease
WS-003(surface)10613	10-16-13	1200			9	X	X	X	X	X
WS-007(0.5-1.0)10613	10-16-13	1240			9	X	X	X	X	X
WS-001(0.5-1.0)10613	10-16-13	1300			9	X	X	X	X	X
DUP-WS-103-10613	10-16-13	—			9	X	X	X	X	X
WS-EB-93-10613	10-16-13	1330			7	X	X	X	X	
WS-TB-178-10613	10-16-13	—			2	X				

7 Turnaround Time Requested (TAT) (please circle)

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

8 Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other

Relinquished by	Date	Time	Received by	Date	Time
Daniel Mays	10-16-13	1600			9
Relinquished by Commercial Carrier: UPS X FedEx ___ Other ___			Received by	Date 10/17/13	Time 0930

Temperature Upon Receipt 0.7-1.7 °C

Custody Seals Intact? (Yes) No

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1426979

Client/Project: Mayflower

Date of Receipt: 10/17/13

Time of Receipt: 0930

Source Code: 60-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.0	TB	WI	Y	B	
2	↓	0.8	↓	↓	↓	↓	
3	↓	1.7	↓	↓	↓	↓	
4	↓	1.2	↓	↓	↓	↓	
5	↓	0.7	↓	↓	↓	↓	
6	↓	0.7	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

1 broken 0+6 jar for VS-014 (1.5-2.0) 10163 @ 820

Unpacker Signature/Emp#: 3647 **Date/Time:** 10/17/13 1008

Issued by Dept. 6042 Management

2174.06

eurofins | Lancaster Laboratories Environmental

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

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 ≥ 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 ≥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.