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 22, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/15/2013
Group Number: 1426282
SDG: PEM20
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)101413 Grab Surface Water	7236677
WS-014(5.5-6.0)101413 Grab Surface Water	7236678
WS-012(1.5-2.0)101413 Grab Surface Water	7236679
WS-012(5.0-5.5)101413 Grab Surface Water	7236680
WS-010(1.5-2.0)101413 Grab Surface Water	7236681
WS-010(3.5-4.0)101413 Grab Surface Water	7236682
WS-006(0.5-1.0)101413 Grab Surface Water	7236683
WS-005(Surface)101413 Grab Surface Water	7236684
WS-011(1.5-2.0)101413 Grab Surface Water	7236685
WS-011(5.0-5.5)101413 Grab Surface Water	7236686
WS-002(Surface)101413 Grab Surface Water	7236687
WS-018(Surface)101413 Grab Surface Water	7236688
WS-003(Surface)101413 Grab Surface Water	7236689
WS-007(0.5-1.0)101413 Grab Surface Water	7236690
WS-001(0.5-1.0)101413 Grab Surface Water	7236691
DUP-WS-102-101413 Grab Surface Water	7236692
WS-EB-91-101413 Grab Water	7236693
WS-TB-176-101413 Water	7236694

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 #: 1426282

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13289WAC026 (Sample number(s): 7236677-7236693)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7236689, 7236690

Sample #s: 7236677, 7236678, 7236679, 7236680, 7236681, 7236682, 7236683, 7236684, 7236685, 7236686, 7236687, 7236688, 7236691, 7236692, 7236693

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

Sample #s: 7236689, 7236690

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

SW-846 6010B, Metals

Batch #: 132881848003 (Sample number(s): 7236677-7236693 UNSPK: 7236683 BKG: 7236683)

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

EPA 1664A, Wet Chemistry

Batch #: 13294807902A (Sample number(s): 7236677-7236692 UNSPK: P230591)

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236677
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 08:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14141 SDG#: PEM20-01

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236677
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 08:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14141 SDG#: PEM20-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.037 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.4	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0316	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236677
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 08:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14141 SDG#: PEM20-01

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	4.91	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0017 J	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	0.0030 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	1.5 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	I132882AA	10/15/2013 22:30	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/15/2013 22:30	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 01:38	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:26	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 07:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236677
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 08:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14141 SDG#: PEM20-01

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236678
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14142 SDG#: PEM20-02

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236678
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14142 SDG#: PEM20-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	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	21.8	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-014(5.5-6.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236678
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14142 SDG#: PEM20-02

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	4.79	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0043 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.40	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0039 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	2.1 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	I132882AA	10/16/2013 02:22	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 02:22	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 02:07	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:30	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 07:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236678
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14142 SDG#: PEM20-02

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236679
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14121 SDG#: PEM20-03

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236679
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14121 SDG#: PEM20-03

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.	0.010	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	0.042 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	22.8	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	0.0312	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236679
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14121 SDG#: PEM20-03

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	5.05	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	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	1.8 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	I132882AA	10/16/2013 02:43	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 02:43	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 02:37	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:42	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 07:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: **WS-012(1.5-2.0)101413 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236679
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14121 SDG#: PEM20-03

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236680
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14122 SDG#: PEM20-04

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236680
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14122 SDG#: PEM20-04

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	0.041 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	23.6	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	0.0301	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236680
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14122 SDG#: PEM20-04

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	5.22	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	2.56	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 03:04	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 03:04	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 03:06	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:46	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 07:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236680
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14122 SDG#: PEM20-04

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236681
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14101 SDG#: PEM20-05

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236681
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14101 SDG#: PEM20-05

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	0.039 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	23.5	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	0.0311	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236681
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14101 SDG#: PEM20-05

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	5.20	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.	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	I132882AA	10/16/2013 03:25	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 03:25	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 03:35	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:50	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 07:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: **WS-010(1.5-2.0)101413 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236681
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14101 SDG#: PEM20-05

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236682
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-06

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236682
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-06

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.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	0.046 J	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	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	23.8	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	0.0308	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236682
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-06

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	5.26	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	2.59	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 03:46	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 03:46	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 04:05	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:54	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236682
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 09:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-06

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236683
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14006 SDG#: PEM20-07

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236683
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14006 SDG#: PEM20-07

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	0.051	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	0.047 J	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	24.4	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0345	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236683
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14006 SDG#: PEM20-07

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	5.36	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	0.0015 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	2.3 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	I132882AA	10/16/2013 04:07	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 04:07	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 04:34	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:02	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236683
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14006 SDG#: PEM20-07

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236684
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14005 SDG#: PEM20-08

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236684
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14005 SDG#: PEM20-08

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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.031 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	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	0.0275	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236684
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14005 SDG#: PEM20-08

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	5.61	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	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 04:28	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 04:28	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 05:04	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 13:58	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236684
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14005 SDG#: PEM20-08

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236685
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14111 SDG#: PEM20-09

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236685
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14111 SDG#: PEM20-09

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.049 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.8	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	0.0346	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-011(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236685
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14111 SDG#: PEM20-09

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	5.44	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	2.72	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0043 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 04:49	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 04:49	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 05:33	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:02	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236685
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 10:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14111 SDG#: PEM20-09

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236686
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14112 SDG#: PEM20-10

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(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236686
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14112 SDG#: PEM20-10

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	0.050 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	24.5	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	0.0380	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(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236686
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14112 SDG#: PEM20-10

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	5.32	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	2.71	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0027 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 05:10	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 05:10	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 06:03	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:06	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236686
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14112 SDG#: PEM20-10

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236687
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:30 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14002 SDG#: PEM20-11

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236687
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:30 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14002 SDG#: PEM20-11

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	0.046 J	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	24.9	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	0.0337	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236687
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:30 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14002 SDG#: PEM20-11

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	5.48	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.72	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0018 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132882AA	10/16/2013 05:31	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 05:31	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 06:32	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:10	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236687
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:30 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14002 SDG#: PEM20-11

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-018(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236688
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14018 SDG#: PEM20-12

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236688
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14018 SDG#: PEM20-12

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.	0.0099	0.049	1
08357	Acenaphthylene	208-96-8	N.D.	0.0099	0.049	1
08357	Anthracene	120-12-7	N.D.	0.0099	0.049	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0099	0.049	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0099	0.049	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0099	0.049	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0099	0.049	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0099	0.049	1
08357	Chrysene	218-01-9	N.D.	0.0099	0.049	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0099	0.049	1
08357	Fluoranthene	206-44-0	N.D.	0.0099	0.049	1
08357	Fluorene	86-73-7	N.D.	0.0099	0.049	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0099	0.049	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0099	0.049	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0099	0.049	1
08357	Naphthalene	91-20-3	0.085	0.030	0.049	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.049	1
08357	Pyrene	129-00-0	N.D.	0.0099	0.049	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	0.0372	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236688
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14018 SDG#: PEM20-12

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	5.55	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	2.70	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	I132882AA	10/16/2013 05:52	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 05:52	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 07:01	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:14	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: **WS-018(Surface)101413 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236688
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:40 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14018 SDG#: PEM20-12

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236689
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14003 SDG#: PEM20-13

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236689
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14003 SDG#: PEM20-13

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.	0.0099	0.049	1
08357	Acenaphthylene	208-96-8	N.D.	0.0099	0.049	1
08357	Anthracene	120-12-7	N.D.	0.0099	0.049	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.0099	0.049	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.0099	0.049	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.0099	0.049	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0099	0.049	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.0099	0.049	1
08357	Chrysene	218-01-9	N.D.	0.0099	0.049	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0099	0.049	1
08357	Fluoranthene	206-44-0	N.D.	0.0099	0.049	1
08357	Fluorene	86-73-7	N.D.	0.0099	0.049	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0099	0.049	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.0099	0.049	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.0099	0.049	1
08357	Naphthalene	91-20-3	0.053	0.030	0.049	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.049	1
08357	Pyrene	129-00-0	N.D.	0.0099	0.049	1

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

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.8	0.033	0.20	1

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

Sample Description: WS-003(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236689
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14003 SDG#: PEM20-13

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**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0467	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.45	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	2.72	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0019 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	2.0 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	I132891AA	10/16/2013 10:35	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132891AA	10/16/2013 10:35	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 07:31	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:18	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:24	Damary Valentin	1

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

Sample Description: WS-003(Surface)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236689
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 11:50 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14003 SDG#: PEM20-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236690
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14007 SDG#: PEM20-14

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

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

Sample Description: WS-007(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236690
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14007 SDG#: PEM20-14

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	0.2	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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.050	1
08357	Anthracene	120-12-7	N.D.		0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.015	J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.050	1
08357	Chrysene	218-01-9	0.011	J	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.050	1
08357	Fluoranthene	206-44-0	0.017	J	0.010	0.050	1
08357	Fluorene	86-73-7	0.011	J	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.015	J	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.		0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.		0.030	0.050	1
08357	Pyrene	129-00-0	0.015	J	0.010	0.050	1

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

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

Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.6		0.033	0.20	1

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

Sample Description: WS-007(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236690
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14007 SDG#: PEM20-14

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**	
07035	Arsenic	7440-38-2	0.0068 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0551	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	4.98	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0025 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0066 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.23	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0048 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0034 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.	2.0 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	I132891AA	10/16/2013 10:56	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132891AA	10/16/2013 10:56	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 08:00	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:30	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:26	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236690
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:10 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14007 SDG#: PEM20-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236691
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14001 SDG#: PEM20-15

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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236691
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14001 SDG#: PEM20-15

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.081	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.7	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	0.0463	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)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236691
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14001 SDG#: PEM20-15

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	5.45	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	2.70	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0031 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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	I132891AA	10/16/2013 11:17	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132891AA	10/16/2013 11:17	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 08:29	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:34	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236691
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 12:20 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14001 SDG#: PEM20-15

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	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: DUP-WS-102-101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236692
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-16FD

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-102-101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236692
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-16FD

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.	0.010	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	0.030	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	24.4	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0395	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-102-101413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236692
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14102 SDG#: PEM20-16FD

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	5.33	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	2.70	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0024 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	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.	1.9 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	I132882AA	10/16/2013 06:14	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/16/2013 06:14	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 13:09	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:38	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13294807902A	10/21/2013 16:52	Michelle L Lalli	1

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

Sample Description: WS-EB-91-101413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236693
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 13:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14E91 SDG#: PEM20-17EB

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-91-101413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236693
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 13:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14E91 SDG#: PEM20-17EB

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.	0.011	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	0.050 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	0.63	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	0.00043 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-91-101413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236693
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013 13:00 by HVA

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14E91 SDG#: PEM20-17EB

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	0.182 J	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	0.0426 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	I132882AA	10/15/2013 22:51	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/15/2013 22:51	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAC026	10/18/2013 13:39	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAC026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132936256001	10/20/2013 09:15	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132881848003	10/19/2013 14:42	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132885713005	10/17/2013 08:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132881848003	10/16/2013 11:16	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132885713005	10/16/2013 15:25	Nelli S Markaryan	1

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

Sample Description: WS-TB-176-101413 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236694
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14176 SDG#: PEM20-18TB*

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-176-101413 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7236694
LL Group # 1426282
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/14/2013

Submitted: 10/15/2013 09:30
Reported: 10/22/2013 13:32

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

14176 SDG#: PEM20-18TB*

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	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132882AA	10/15/2013 23:12	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132882AA	10/15/2013 23:12	Brett W Kenyon	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426282
Reported: 10/22/13 at 01:32 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I132882AA	Sample number(s): 7236677-7236688,7236692-7236694								
Acetone	N.D.	3.0	5.0	ug/l	103		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	89		61-130		
Benzene	N.D.	0.1	0.5	ug/l	90		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	93		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	90		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	90		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	97		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	79		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	96		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	89		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	91		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	91		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	90		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	81		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	92		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	86		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	92		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	92		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	93		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	93		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	95		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	96		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	85		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	94		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	96		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	91		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	90		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	90		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	98		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	95		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	87		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	87		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	91		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	88		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	88		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	89		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	85		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	97		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: 1426282
Reported: 10/22/13 at 01:32 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	87		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	91		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	89		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	100		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	94		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
Styrene	N.D.	0.1	0.5	ug/l	87		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	101		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	89		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	87		65-131		
Toluene	N.D.	0.1	0.5	ug/l	87		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	94		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	90		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	96		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	90		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	91		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	101		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	82		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	87		80-120		
Batch number: I132891AA	Sample number(s): 7236689-7236691								
Acetone	N.D.	3.0	5.0	ug/l	118		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	92		61-130		
Benzene	N.D.	0.1	0.5	ug/l	94		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	89		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	93		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	97		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	81		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	120		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	97		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	84		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	96		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	89		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	113		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	96		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	98		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	100		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	86		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	98		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	97		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	92		80-120		

*- 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: 1426282
Reported: 10/22/13 at 01:32 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	93		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	104		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	89		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	93		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	94		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	92		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	91		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	92		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	103		73-120		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	97		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	90		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	99		80-120		
Styrene	N.D.	0.1	0.5	ug/l	92		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	103		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	94		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	112		65-131		
Toluene	N.D.	0.1	0.5	ug/l	92		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	97		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	94		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	99		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	94		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	97		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	102		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	85		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	91		80-120		
Batch number: 13289WAC026	Sample number(s): 7236677-7236693								
Acenaphthene	N.D.	0.010	0.050	ug/l	99	91	77-118	9	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	104	96	80-123	9	30
Anthracene	N.D.	0.010	0.050	ug/l	105	93	78-123	13	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	101	89	73-127	13	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	97	85	72-120	14	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	108	94	79-136	14	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	104	91	64-130	13	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	108	95	73-131	12	30
Chrysene	N.D.	0.010	0.050	ug/l	95	90	76-125	5	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	94	87	58-131	8	30
Fluoranthene	N.D.	0.010	0.050	ug/l	99	89	79-124	12	30
Fluorene	N.D.	0.010	0.050	ug/l	97	89	74-115	9	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	100	90	62-130	10	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	108	97	80-126	11	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	108	96	81-124	11	30
Naphthalene	N.D.	0.030	0.050	ug/l	102	91	75-120	11	30
Phenanthrene	N.D.	0.030	0.050	ug/l	96	86	75-120	11	30
Pyrene	N.D.	0.010	0.050	ug/l	107	95	71-130	12	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: 1426282
Reported: 10/22/13 at 01:32 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132881848003	Sample number(s): 7236677-7236693									
Arsenic	N.D.		0.0068	0.0200	mg/l	99		90-113		
Barium	N.D.		0.00033	0.0050	mg/l	103		90-110		
Cadmium	N.D.		0.00076	0.0050	mg/l	104		90-112		
Calcium	N.D.		0.0334	0.200	mg/l	100		90-112		
Chromium	N.D.		0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.		0.0047	0.0150	mg/l	110		88-110		
Magnesium	N.D.		0.0167	0.100	mg/l	100		89-110		
Nickel	N.D.		0.0015	0.0100	mg/l	107		90-111		
Selenium	N.D.		0.0084	0.0200	mg/l	105		80-120		
Silver	N.D.		0.0021	0.0050	mg/l	92		80-120		
Vanadium	N.D.		0.0020	0.0050	mg/l	104		90-110		
Batch number: 132885713005	Sample number(s): 7236677-7236693									
Mercury	N.D.		0.00006 0	0.00020	mg/l	95		80-120		
Batch number: 13294807902A	Sample number(s): 7236677-7236692									
HEM (oil & grease)	2.9	J	1.4	5.0	mg/l	94	98	78-114	4	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: I132882AA	Sample number(s): 7236677-7236688,7236692-7236694 UNSPK: 7236677								
Acetone	110	112	57-163	2	30				
Allyl Chloride	98	99	56-160	1	30				
Benzene	103	102	87-126	0	30				
Bromobenzene	102	102	80-123	0	30				
Bromochloromethane	96	97	82-125	1	30				
Bromodichloromethane	100	100	82-133	0	30				
Bromoform	101	102	60-138	1	30				
Bromomethane	86	86	66-130	0	30				
2-Butanone	103	101	56-160	2	30				
n-Butylbenzene	103	101	83-131	3	30				
sec-Butylbenzene	106	103	84-128	3	30				
tert-Butylbenzene	106	104	84-135	2	30				
Carbon Tetrachloride	111	108	81-148	2	30				
Chlorobenzene	101	100	78-133	1	30				
Chloroethane	89	88	70-139	1	30				
Chloroform	103	104	86-136	0	30				
Chloromethane	94	93	49-135	1	30				
2-Chlorotoluene	102	102	75-134	0	30				
4-Chlorotoluene	102	101	76-134	1	30				
1,2-Dibromo-3-chloropropane	98	98	43-143	0	30				
Dibromochloromethane	100	102	79-125	2	30				
1,2-Dibromoethane	100	100	84-127	0	30				
Dibromomethane	99	101	83-126	2	30				
1,2-Dichlorobenzene	104	102	83-117	1	30				
1,3-Dichlorobenzene	106	105	79-132	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: 1426282
Reported: 10/22/13 at 01:32 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,4-Dichlorobenzene	104	103	79-120	1	30				
Dichlorodifluoromethane	95	86	28-136	10	30				
1,1-Dichloroethane	106	107	88-136	1	30				
1,2-Dichloroethane	105	105	82-135	0	30				
1,1-Dichloroethene	110	108	83-150	2	30				
cis-1,2-Dichloroethene	100	101	82-129	1	30				
trans-1,2-Dichloroethene	104	103	88-127	1	30				
Dichlorofluoromethane	110	109	81-161	1	30				
1,2-Dichloropropane	106	106	91-126	0	30				
1,3-Dichloropropane	101	102	80-127	2	30				
2,2-Dichloropropane	103	103	80-134	0	30				
1,1-Dichloropropene	104	103	86-139	1	30				
cis-1,3-Dichloropropene	99	102	74-132	2	30				
trans-1,3-Dichloropropene	95	96	71-128	2	30				
Ethyl ether	93	89	57-139	4	30				
Ethylbenzene	101	101	80-140	1	30				
Freon 113	107	98	77-147	9	30				
Hexachlorobutadiene	115	113	65-128	2	30				
Isopropylbenzene	101	100	81-133	2	30				
p-Isopropyltoluene	104	101	84-124	2	30				
Methyl Tertiary Butyl Ether	92	93	82-132	1	30				
4-Methyl-2-Pentanone	102	102	69-149	0	30				
Methylene Chloride	103	104	77-135	1	30				
n-Propylbenzene	105	103	79-131	2	30				
Styrene	97	97	63-151	1	30				
1,1,1,2-Tetrachloroethane	103	103	87-126	0	30				
1,1,2,2-Tetrachloroethane	103	104	75-131	1	30				
Tetrachloroethene	106	104	75-129	1	30				
Tetrahydrofuran	91	90	56-154	1	30				
Toluene	99	99	83-127	1	30				
1,2,3-Trichlorobenzene	101	103	73-125	2	30				
1,2,4-Trichlorobenzene	103	103	77-120	0	30				
1,1,1-Trichloroethane	106	105	85-140	1	30				
1,1,2-Trichloroethane	102	103	85-129	1	30				
Trichloroethene	104	102	85-131	1	30				
Trichlorofluoromethane	106	101	73-139	5	30				
1,2,3-Trichloropropane	103	104	76-120	1	30				
1,2,4-Trimethylbenzene	102	101	87-126	1	30				
1,3,5-Trimethylbenzene	103	102	89-129	1	30				
Vinyl Chloride	93	92	62-135	1	30				
Xylene (Total)	99	99	81-137	0	30				
Batch number: I132891AA	Sample number(s): 7236689-7236691 UNSPK: P237281								
Acetone	97	90	57-163	5	30				
Allyl Chloride	98	97	56-160	1	30				
Benzene	101	100	87-126	1	30				
Bromobenzene	99	98	80-123	1	30				
Bromochloromethane	93	94	82-125	0	30				
Bromodichloromethane	99	99	82-133	0	30				
Bromoform	98	95	60-138	3	30				
Bromomethane	81	82	66-130	1	30				
2-Butanone	115	116	56-160	1	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: 1426282
Reported: 10/22/13 at 01:32 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
n-Butylbenzene	103	102	83-131	2	30				
sec-Butylbenzene	104	103	84-128	1	30				
tert-Butylbenzene	102	102	84-135	1	30				
Carbon Tetrachloride	109	108	81-148	1	30				
Chlorobenzene	98	97	78-133	2	30				
Chloroethane	89	89	70-139	0	30				
Chloroform	103	102	86-136	1	30				
Chloromethane	89	90	49-135	1	30				
2-Chlorotoluene	100	100	75-134	1	30				
4-Chlorotoluene	100	99	76-134	1	30				
1,2-Dibromo-3-chloropropane	95	99	43-143	4	30				
Dibromochloromethane	100	98	79-125	2	30				
1,2-Dibromoethane	98	97	84-127	1	30				
Dibromomethane	99	99	83-126	0	30				
1,2-Dichlorobenzene	100	100	83-117	0	30				
1,3-Dichlorobenzene	103	102	79-132	1	30				
1,4-Dichlorobenzene	101	100	79-120	1	30				
Dichlorodifluoromethane	88	87	28-136	1	30				
1,1-Dichloroethane	106	105	88-136	1	30				
1,2-Dichloroethane	105	105	82-135	0	30				
1,1-Dichloroethene	107	107	83-150	0	30				
cis-1,2-Dichloroethene	98	98	82-129	1	30				
trans-1,2-Dichloroethene	102	102	88-127	0	30				
Dichlorofluoromethane	111	111	81-161	0	30				
1,2-Dichloropropane	105	105	91-126	0	30				
1,3-Dichloropropane	100	100	80-127	1	30				
2,2-Dichloropropane	99	99	80-134	1	30				
1,1-Dichloropropene	102	102	86-139	0	30				
cis-1,3-Dichloropropene	97	98	74-132	1	30				
trans-1,3-Dichloropropene	93	93	71-128	0	30				
Ethyl ether	92	91	57-139	1	30				
Ethylbenzene	101	99	80-140	1	30				
Freon 113	105	102	77-147	3	30				
Hexachlorobutadiene	111	110	65-128	1	30				
Isopropylbenzene	99	98	81-133	1	30				
p-Isopropyltoluene	102	101	84-124	1	30				
Methyl Tertiary Butyl Ether	90	92	82-132	2	30				
4-Methyl-2-Pentanone	103	101	69-149	2	30				
Methylene Chloride	103	102	77-135	1	30				
n-Propylbenzene	104	103	79-131	0	30				
Styrene	96	94	63-151	2	30				
1,1,1,2-Tetrachloroethane	101	100	87-126	2	30				
1,1,2,2-Tetrachloroethane	103	103	75-131	0	30				
Tetrachloroethene	101	100	75-129	1	30				
Tetrahydrofuran	91	94	56-154	4	30				
Toluene	97	96	83-127	1	30				
1,2,3-Trichlorobenzene	96	98	73-125	2	30				
1,2,4-Trichlorobenzene	98	99	77-120	1	30				
1,1,1-Trichloroethane	105	104	85-140	1	30				
1,1,2-Trichloroethane	100	100	85-129	1	30				
Trichloroethene	101	101	85-131	0	30				
Trichlorofluoromethane	106	107	73-139	1	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: 1426282
Reported: 10/22/13 at 01:32 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2,3-Trichloropropane	101	102	76-120	1	30				
1,2,4-Trimethylbenzene	101	100	87-126	1	30				
1,3,5-Trimethylbenzene	102	101	89-129	1	30				
Vinyl Chloride	90	91	62-135	1	30				
Xylene (Total)	97	95	81-137	2	30				
Batch number: 132881848003	Sample number(s): 7236677-7236693 UNSPK: 7236683 BKG: 7236683								
Arsenic	105	101	81-123	4	20	N.D.	N.D.	0 (1)	20
Barium	104	102	78-118	2	20	0.0345	0.0347	1	20
Cadmium	104	102	83-116	2	20	N.D.	N.D.	0 (1)	20
Calcium	100	96	75-125	2	20	5.36	5.39	0	20
Chromium	105	103	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	110	107	75-125	3	20	N.D.	N.D.	0 (1)	20
Magnesium	100	96	75-125	1	20	2.66	2.68	1	20
Nickel	107	105	86-115	2	20	0.0015 J	N.D.	200* (1)	20
Selenium	106	104	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	93	90	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	108	105	90-117	2	20	N.D.	N.D.	0 (1)	20
Batch number: 132885713005	Sample number(s): 7236677-7236693 UNSPK: 7236684 BKG: 7236684								
Mercury	97	93	80-120	4	20	N.D.	N.D.	0 (1)	20
Batch number: 13294807902A	Sample number(s): 7236677-7236692 UNSPK: P230591								
HEM (oil & grease)	22*		78-114						

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: I132882AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7236677	101	107	97	96
7236678	102	106	97	95
7236679	103	106	98	96
7236680	103	109	97	96
7236681	103	106	97	96
7236682	103	107	97	96
7236683	103	105	97	95
7236684	103	107	97	95
7236685	104	108	97	95
7236686	104	106	97	95
7236687	103	106	97	95
7236688	104	108	97	96
7236692	104	109	97	96
7236693	102	108	98	96
7236694	102	106	97	95

*- Outside of specification
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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426282
Reported: 10/22/13 at 01:32 PM

Surrogate Quality Control

Blank	100	103	98	95
LCS	102	104	98	97
MS	103	105	98	98
MSD	103	105	97	97
Limits:	77-114	74-113	77-110	78-110

Analysis Name: BTEX 25-ml purge
Batch number: I132891AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7236689	102	106	98	97
7236690	103	105	98	97
7236691	103	107	98	97
Blank	102	106	99	97
LCS	102	102	99	98
MS	104	105	98	99
MSD	104	106	98	99
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13289WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7236677	95	63	101
7236678	88	73	90
7236679	95	81	97
7236680	91	64	92
7236681	97	82	103
7236682	95	85	99
7236683	96	69	97
7236684	86	73	91
7236685	86	71	87
7236686	94	74	93
7236687	101	77	105
7236688	101	79	99
7236689	82	45*	88
7236690	71	60*	79
7236691	97	71	98
7236692	92	81	90
7236693	100	104	101
Blank	101	113	107
LCS	99	114	108
LCSD	88	96	96
Limits:	44-137	62-141	51-136

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ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1426282 Sample # 7236677-94
Instructions on reverse side correspond with circled numbers.

1 of 2

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 / Ryan Lewis

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

3 Grab / Composite

2 Sample Identification | Collected Date | Time | Grab | Composite | Total # of Containers | **5 Analyses Requested** (Preservation Code) | SCR#:

Sample Identification	Date	Time	Grab	Composite	Total # of Containers	VOCs 8260B (H)	PAH 8270 SIM (H)	RCRA Metals Hardness Ni,V,Ca,Mg (D)	Diss Metals (D)	HEM Oil & Grease (H)
WS-014(1.5-2.0)101413	10-14-13	0850	X		9	X	X	X	X	X
WS-014(5.5-6.0)101413	10-14-13	0900	X		9	X	X	X	X	X
WS-012(1.5-2.0)101413	10-14-13	0910	X		9	X	X	X	X	X
WS-012(5.0-5.5)101413	10-14-13	0920	X		9	X	X	X	X	X
WS-010(1.5-2.0)101413	10-14-13	0940	X		9	X	X	X	X	X
WS-010(3.5-4.0)101413	10-14-13	0950	X		9	X	X	X	X	X
WS-006(0.5-1.0)101413	10-14-13	1000	X		9	X	X	X	X	X
WS-005(surface)101413	10-14-13	1010	X		9	X	X	X	X	X
WS-011(1.5-2.0)101413	10-14-13	1056	X		9	X	X	X	X	X
WS-011(5.0-5.5)101413	10-14-13	1100	X		9	X	X	X	X	X
WS-002(surface)101413	10-14-13	1130	X		9	X	X	X	X	X
WS-018(surface)101413	10-14-13	1140	X		9	X	X	X	X	X

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.

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
	10-14-13	1530			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by	10/15/13	0930

9

Temperature Upon Receipt 0.7-2.4 °C

Custody Seals Intact? (Yes) No

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1426282 Sample # 7236677-94
Instructions on reverse side correspond with circled numbers.

2 of 2

SCR#: _____

1 Client Information

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

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

5 Analyses Requested — Preservation Code

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	H		N		H					
						VOCs 8260B	PAH 8270SIM	RCRA Metals + Hardness Ni,V,Ca,Mg	Diss. Metals	HEM 91 & Grease					
WS-003(Surface)101413	10-14-13	1150	X		9	X	X	X	X	X					
WS-007(0.5-1.0)101413	10-14-13	[illegible]0	X		9	X	X	X	X	X					
WS-001(0.5-1.0)101413	10-1413	1220	X		9	X	X	X	X	X					
DUP-WS-102-101413	10-14-13	—	X		9	X	X	X	X	X					
WS-EB-91-101413	10-14-13	1300	X		7	X	X	X	X						
WS-TB-176-101413	10-14-13	—	X		2	X									

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

6 Remarks

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
[signature]	10-14-13	1530			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			[signature]	10/15/13	0930

9

Temperature Upon Receipt 0.7-2.4 °C

Custody Seals Intact? (Yes) No

eurofins | Lancaster Laboratories

Environmental Sample Administration Receipt Documentation Log

1426282

Client/Project: Mayflower

Date of Receipt: 10/15/13

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	DT146	2.4	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3	↓	0.9	↓	↓	↓	↓	
4	↓	2.1	↓	↓	↓	↓	
5	↓	0.9	↓	↓	↓	↓	
6	↓	0.7	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 10/15/13 1033

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

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

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

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

> greater than

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.