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

November 07, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/31/2013
Group Number: 1430380
SDG: PEM55
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-018(Surface)103013 Grab Surface Water	7258350
WS-003(Surface)103013 Grab Surface Water	7258351
WS-007(0.5-1.0)103013 Grab Surface Water	7258352
WS-001(0.5-1.0)103013 Grab Surface Water	7258353
WS-002(Surface)103013 Grab Surface Water	7258354
WS-005(Surface)103013 Grab Surface Water	7258355
WS-014(1.5-2.0)103013 Grab Surface Water	7258356
WS-014(5.5-6.0)103013 Grab Surface Water	7258357
WS-012(1.5-2.0)103013 Grab Surface Water	7258358
WS-012(5.0-5.5)103013 Grab Surface Water	7258359
WS-010(1.5-2.0)103013 Grab Surface Water	7258360
WS-010(3.5-4.0)103013 Grab Surface Water	7258361
WS-006(0.5-1.0)103013 Grab Surface Water	7258362
WS-011(1.5-2.0)103013 Grab Surface Water	7258363
WS-011(5.0-5.5)103013 Grab Surface Water	7258364
WS-EB-107-103013 Grab Water	7258365
WS-TB-190-103013 Water	7258366
DUP-WS-110-103013 Grab Surface Water	7258367

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	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 #: 1430380

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:

SW-846 8260B 25mL purge, GC/MS Volatiles

Batch #: G133042AA (Sample number(s): 7258350-7258367 UNSPK: P253617)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Acetone, 2-Butanone, Tetrahydrofuran, 1,2-Dibromo-3-chloropropane, Benzene

SW-846 8270C SIM, GC/MS Semivolatiles

Sample #s: 7258350, 7258351, 7258352, 7258353, 7258354, 7258355, 7258356, 7258357, 7258358, 7258359, 7258360, 7258361, 7258362, 7258363, 7258364, 7258365, 7258367

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

EPA 1664A, Wet Chemistry

Batch #: 13310807903A (Sample number(s): 7258350-7258364, 7258367 UNSPK: 7258350)

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

Sample Description: WS-018(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258350
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30018 SDG#: PEM55-01

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-018(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258350
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30018 SDG#: PEM55-01

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	20.9	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	0.0344	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258350
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30018 SDG#: PEM55-01

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	4.59		0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.30		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	3.3	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	G133042AA	10/31/2013 22:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 22:32	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 14:07	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:23	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258351
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30003 SDG#: PEM55-02

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-003(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258351
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30003 SDG#: PEM55-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	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	19.9	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	0.0289	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-003(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258351
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 08:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30003 SDG#: PEM55-02

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	4.33	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	2.21	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	G133042AA	10/31/2013 22:54	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 22:54	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 14:36	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:27	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258352
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30007 SDG#: PEM55-03

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-007(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258352
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30007 SDG#: PEM55-03

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.1	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0069 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0361	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-007(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258352
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30007 SDG#: PEM55-03

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	4.11	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	1.90	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	0.0021 J	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	G133042AA	10/31/2013 23:16	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 23:16	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 15:05	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:39	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:06	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258353
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30001 SDG#: PEM55-04

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-001(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258353
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30001 SDG#: PEM55-04

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.4	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	0.0274	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258353
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30001 SDG#: PEM55-04

CAT No.	Analysis Name		CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals		**SW-846 6010B**		mg/l	mg/l	mg/l	
01750	Calcium		7440-70-2	4.24	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	2.14	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	G133042AA	10/31/2013 23:37	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 23:37	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 15:35	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:43	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258354
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30002 SDG#: PEM55-05

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-002(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258354
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30002 SDG#: PEM55-05

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.0	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	0.0231	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258354
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 09:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30002 SDG#: PEM55-05

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	4.17	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	2.09	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	G133042AA	10/31/2013 23:59	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 23:59	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 16:04	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:47	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258355
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 10:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30005 SDG#: PEM55-06

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-005(Surface)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258355
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 10:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30005 SDG#: PEM55-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	20.7	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	0.0266	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258355
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 10:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30005 SDG#: PEM55-06

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	4.60	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	2.24	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	G133042AA	11/01/2013 00:21	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 00:21	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 16:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:51	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-014(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258356
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30141 SDG#: PEM55-07

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-014(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258356
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30141 SDG#: PEM55-07

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	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.1	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	0.0253	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258356
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30141 SDG#: PEM55-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	3.93	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.00	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	G133042AA	11/01/2013 00:42	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 00:42	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 17:02	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 12:59	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258357
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30142 SDG#: PEM55-08

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-014(5.5-6.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258357
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30142 SDG#: PEM55-08

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.0	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	0.0247	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258357
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30142 SDG#: PEM55-08

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	3.90		0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.01		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.5	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	G133042AA	11/01/2013 01:04	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 01:04	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 17:32	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:55	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258358
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30121 SDG#: PEM55-09

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-012(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258358
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30121 SDG#: PEM55-09

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.4	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	0.0236	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258358
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 12:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30121 SDG#: PEM55-09

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	4.03		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	2.04		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.8	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	G133042AA	11/01/2013 01:26	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 01:26	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 18:01	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 13:59	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258359
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30122 SDG#: PEM55-10

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-012(5.0-5.5)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258359
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30122 SDG#: PEM55-10

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.9	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	0.0248	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258359
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:00 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30122 SDG#: PEM55-10

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	4.13	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.09	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	G133042AA	11/01/2013 01:48	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 01:48	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 18:30	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:03	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258360
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:10 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30101 SDG#: PEM55-11

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-010(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258360
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:10 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30101 SDG#: PEM55-11

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	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.5	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	0.0275	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-010(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258360
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:10 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30101 SDG#: PEM55-11

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.03		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	2.05		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.5	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	G133042AA	11/01/2013 02:10	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 02:10	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 19:00	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:07	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258361
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30102 SDG#: PEM55-12

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-010(3.5-4.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258361
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30102 SDG#: PEM55-12

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	18.7	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	0.0282	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258361
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:20 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30102 SDG#: PEM55-12

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	4.06	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	2.08	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	G133042AA	11/01/2013 02:32	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 02:32	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 19:29	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:11	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258362
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30006 SDG#: PEM55-13

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-006(0.5-1.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258362
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30006 SDG#: PEM55-13

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.1	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	0.0297	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258362
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:30 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30006 SDG#: PEM55-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.15	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.11	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	G133042AA	11/01/2013 02:54	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 02:54	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 19:58	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:15	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258363
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30111 SDG#: PEM55-14

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	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258363
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30111 SDG#: PEM55-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.7	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	0.0287	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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258363
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30111 SDG#: PEM55-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	4.28		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	2.19		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.4	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	G133042AA	11/01/2013 03:16	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 03:16	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 23:28	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:27	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258363
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:40 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30111 SDG#: PEM55-14

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	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258364
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30112 SDG#: PEM55-15

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-011(5.0-5.5)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258364
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30112 SDG#: PEM55-15

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	0.1	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.1	J	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.051	1
08357	Anthracene	120-12-7	N.D.		0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.051	1
08357	Chrysene	218-01-9	N.D.		0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.		0.010	0.051	1
08357	Fluorene	86-73-7	N.D.		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.		0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.030	0.051	1
08357	Pyrene	129-00-0	N.D.		0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.7		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	0.0290		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)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258364
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30112 SDG#: PEM55-15

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	4.27		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	2.21		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	3.1	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	G133042AA	11/01/2013 03:38	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 03:38	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/04/2013 23:57	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:31	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258364
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 13:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30112 SDG#: PEM55-15

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	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Sample Description: WS-EB-107-103013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258365
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 14:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30107 SDG#: PEM55-16EB

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-107-103013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258365
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 14:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30107 SDG#: PEM55-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	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	0.73	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	0.0025 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-107-103013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258365
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 14:50 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30107 SDG#: PEM55-16EB

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	0.220	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	0.0447 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	G133042AA	10/31/2013 21:48	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 21:48	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/05/2013 00:26	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:35	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1

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

Sample Description: WS-TB-190-103013 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258366
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30190 SDG#: PEM55-17TB

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-190-103013 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258366
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30190 SDG#: PEM55-17TB

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	G133042AA	10/31/2013 22:10	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	10/31/2013 22:10	Sara E Johnson	1

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

Sample Description: DUP-WS-110-103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258367
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30110 SDG#: PEM55-18FD*

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-110-103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258367
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30110 SDG#: PEM55-18FD*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	19.0	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	0.0298	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-110-103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258367
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30110 SDG#: PEM55-18FD*

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	4.15	0.0334	0.200	1
07051	Chromium		7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead		7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium		7439-95-4	2.10	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	G133042AA	11/01/2013 03:59	Sara E Johnson	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G133042AA	11/01/2013 03:59	Sara E Johnson	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13305WAC026	11/05/2013 00:55	Catherine E Bachman	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13305WAC026	11/02/2013 11:00	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	133116256012	11/07/2013 07:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07046	Barium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07055	Lead	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07066	Silver	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	133051848005	11/06/2013 14:39	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	133045713006	11/04/2013 08:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133051848005	11/04/2013 09:39	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713006	11/01/2013 17:00	Nelli S Markaryan	1

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

Sample Description: DUP-WS-110-103013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7258367
LL Group # 1430380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/30/2013 by CP

Submitted: 10/31/2013 09:15
Reported: 11/07/2013 11:27

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

30110 SDG#: PEM55-18FD*

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	13310807903A	11/06/2013 16:38	Michelle L Lalli	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1430380
Reported: 11/07/13 at 11:27 AM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: G133042AA	Sample number(s): 7258350-7258367								
Acetone	N.D.	3.0	5.0	ug/l	91		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	72		61-130		
Benzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	108		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	98		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	107		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	92		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	89		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		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	95		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	79		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	101		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	79		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	103		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	109		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	101		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	107		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	103		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	108		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	67		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	92		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	99		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	108		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	95		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	94		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	81		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	99		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	90		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	92		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	98		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	94		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: 1430380
Reported: 11/07/13 at 11:27 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	96		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	95		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	87		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	100		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Styrene	N.D.	0.1	0.5	ug/l	102		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	102		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	97		65-131		
Toluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	92		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	98		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	102		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	105		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	94		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	106		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	90		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	101		80-120		
Batch number: 13305WAC026	Sample number(s): 7258350-7258365,7258367								
Acenaphthene	N.D.	0.010	0.050	ug/l	106	109	77-118	3	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	107	107	80-123	1	30
Anthracene	N.D.	0.010	0.050	ug/l	111	115	78-123	3	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	107	102	73-127	4	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	99	96	72-120	3	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	106	101	79-136	5	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	105	104	64-130	1	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	111	110	73-131	1	30
Chrysene	N.D.	0.010	0.050	ug/l	102	103	76-125	1	30
Dibenz(a,h)anthracene	0.013 J	0.010	0.050	ug/l	96	95	58-131	1	30
Fluoranthene	N.D.	0.010	0.050	ug/l	105	109	79-124	4	30
Fluorene	N.D.	0.010	0.050	ug/l	106	105	74-115	0	30
Indeno(1,2,3-cd)pyrene	0.012 J	0.010	0.050	ug/l	99	97	62-130	2	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	116	116	80-126	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	114	114	81-124	0	30
Naphthalene	N.D.	0.030	0.050	ug/l	106	105	75-120	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	100	101	75-120	1	30
Pyrene	N.D.	0.010	0.050	ug/l	110	107	71-130	3	30
Batch number: 133045713006	Sample number(s): 7258350-7258365,7258367								
Mercury	N.D.	0.00006 0	0.00020	mg/l	107		80-120		
Batch number: 133051848005	Sample number(s): 7258350-7258365,7258367								
Arsenic	N.D.	0.0068	0.0200	mg/l	98		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	99		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	100		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	97		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	98		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	103		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	96		89-110		

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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1430380
Reported: 11/07/13 at 11:27 AM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nickel	N.D.		0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.		0.0084	0.0200	mg/l	98		80-120		
Silver	N.D.		0.0021	0.0050	mg/l	96		80-120		
Vanadium	N.D.		0.0020	0.0050	mg/l	98		90-110		
Batch number: 13310807903A	Sample number(s): 7258350-7258364,7258367									
HEM (oil & grease)	1.5	J	1.4	5.0	mg/l	90	80	78-114	11	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: G133042AA	Sample number(s): 7258350-7258367 UNSPK: P253617								
Acetone	242*	275*	57-163	13	30				
Allyl Chloride	81	82	56-160	2	30				
Benzene	65 (2)	90 (2)	87-126	2	30				
Bromobenzene	108	110	80-123	2	30				
Bromochloromethane	109	113	82-125	4	30				
Bromodichloromethane	100	103	82-133	4	30				
Bromoform	100	103	60-138	4	30				
Bromomethane	90	90	66-130	1	30				
2-Butanone	222*	254*	56-160	13	30				
n-Butylbenzene	102	105	83-131	3	30				
sec-Butylbenzene	107	109	84-128	3	30				
tert-Butylbenzene	108	110	84-135	1	30				
Carbon Tetrachloride	104	108	81-148	4	30				
Chlorobenzene	108	110	78-133	2	30				
Chloroethane	80	82	70-139	3	30				
Chloroform	110	112	86-136	2	30				
Chloromethane	76	75	49-135	1	30				
2-Chlorotoluene	109	112	75-134	3	30				
4-Chlorotoluene	109	110	76-134	2	30				
1,2-Dibromo-3-chloropropane	267*	315*	43-143	17	30				
Dibromochloromethane	99	102	79-125	3	30				
1,2-Dibromoethane	101	105	84-127	4	30				
Dibromomethane	100	104	83-126	4	30				
1,2-Dichlorobenzene	106	109	83-117	3	30				
1,3-Dichlorobenzene	109	112	79-132	3	30				
1,4-Dichlorobenzene	108	110	79-120	2	30				
Dichlorodifluoromethane	61	59	28-136	4	30				
1,1-Dichloroethane	98	101	88-136	3	30				
1,2-Dichloroethane	104	103	82-135	0	30				
1,1-Dichloroethene	109	113	83-150	3	30				
cis-1,2-Dichloroethene	105	108	82-129	3	30				
trans-1,2-Dichloroethene	112	113	88-127	2	30				
Dichlorofluoromethane	114	114	81-161	0	30				
1,2-Dichloropropane	98	102	91-126	4	30				
1,3-Dichloropropane	94	94	80-127	0	30				
2,2-Dichloropropane	98	102	80-134	4	30				
1,1-Dichloropropene	107	112	86-139	4	30				

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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1430380
Reported: 11/07/13 at 11:27 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
cis-1,3-Dichloropropene	97	101	74-132	4	30				
trans-1,3-Dichloropropene	90	93	71-128	4	30				
Ethyl ether	90	90	57-139	0	30				
Ethylbenzene	107	108	80-140	1	30				
Freon 113	109	112	77-147	2	30				
Hexachlorobutadiene	105	107	65-128	1	30				
Isopropylbenzene	108	110	81-133	2	30				
p-Isopropyltoluene	103	107	84-124	3	30				
Methyl Tertiary Butyl Ether	94	96	82-132	3	30				
4-Methyl-2-Pentanone	82	83	69-149	2	30				
Methylene Chloride	100	102	77-135	2	30				
n-Propylbenzene	105	108	79-131	2	30				
Styrene	109	112	63-151	2	30				
1,1,1,2-Tetrachloroethane	100	101	87-126	0	30				
1,1,2,2-Tetrachloroethane	95	98	75-131	3	30				
Tetrachloroethene	116	118	75-129	2	30				
Tetrahydrofuran	231*	261*	56-154	12	30				
Toluene	106	107	83-127	1	30				
1,2,3-Trichlorobenzene	88	93	73-125	5	30				
1,2,4-Trichlorobenzene	98	101	77-120	3	30				
1,1,1-Trichloroethane	106	109	85-140	3	30				
1,1,2-Trichloroethane	103	103	85-129	0	30				
Trichloroethene	115	119	85-131	3	30				
Trichlorofluoromethane	99	99	73-139	0	30				
1,2,3-Trichloropropane	101	104	76-120	3	30				
1,2,4-Trimethylbenzene	105	108	87-126	3	30				
1,3,5-Trimethylbenzene	104	108	89-129	3	30				
Vinyl Chloride	91	90	62-135	1	30				
Xylene (Total)	114	118	81-137	1	30				
Batch number: 133045713006	Sample number(s): 7258350-7258365,7258367 UNSPK: 7258353 BKG: 7258353								
Mercury	106	108	80-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 133051848005	Sample number(s): 7258350-7258365,7258367 UNSPK: 7258356 BKG: 7258356								
Arsenic	100	101	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	101	103	78-118	2	20	0.0253	0.0256	1	20
Cadmium	100	102	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	97	99	75-125	1	20	3.93	3.97	1	20
Chromium	100	100	76-120	0	20	N.D.	N.D.	0 (1)	20
Lead	105	107	75-125	2	20	N.D.	N.D.	0 (1)	20
Magnesium	97	98	75-125	0	20	2.00	2.04	2	20
Nickel	104	105	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	100	99	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	100	100	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	99	101	90-117	2	20	N.D.	N.D.	0 (1)	20
Batch number: 13310807903A	Sample number(s): 7258350-7258364,7258367 UNSPK: 7258350								
HEM (oil & grease)	75*		78-114						

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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1430380
Reported: 11/07/13 at 11:27 AM

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge
Batch number: G133042AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7258350	102	101	96	92
7258351	102	101	96	91
7258352	102	103	96	91
7258353	102	102	96	91
7258354	102	102	96	92
7258355	103	100	95	91
7258356	102	101	95	91
7258357	102	102	96	91
7258358	101	103	96	91
7258359	103	102	95	91
7258360	102	102	95	91
7258361	102	102	95	91
7258362	102	103	95	92
7258363	103	104	96	92
7258364	104	103	96	90
7258365	101	104	96	93
7258366	102	103	96	92
7258367	103	102	96	91
Blank	102	104	96	92
LCS	101	100	97	93
MS	101	102	97	93
MSD	101	100	97	93
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13305WAC026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7258350	88	71	106
7258351	84	78	110
7258352	81	84	106
7258353	85	79	107
7258354	87	77	108
7258355	92	92	109
7258356	77	83	106
7258357	85	84	107
7258358	79	71	104
7258359	82	77	107
7258360	89	76	104
7258361	83	74	106
7258362	81	80	104
7258363	100	80	105
7258364	91	79	109
7258365	118	107	111
7258367	97	87	108
Blank	94	82	106
LCS	112	107	115

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Quality Control Summary

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Surrogate Quality Control

LCSD	116	109	115
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 # 1430380 Sample # 7258350-67
Instructions on reverse side correspond with circled numbers.

1 of 2

SCR#: _____

(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: Clement Papafio / Ryan Lewis

(4) Matrix

Soil ☐ Sediment ☐ Water ☒ (Ground ☐ Potable ☐ Surface ☒ NPDES ☐) Oil ☐ Air ☐

(5) Analyses Requested

Preservation Code: H | | N | | H | | | | | |

Preservation Codes

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

(6) Remarks

Lab to filter and preserve diss metals upon receipt

(2) Sample Identification	Collected Date	Collected Time	(3) Grab	(3) Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals + hardness Ni, V, Ca, Mg	Diss Metals	HEM Oil & Grease
WS-008 (Surface) 103013	10-30-13	0830	X		9	X	X	X	X	X
WS-003 (Surface) 103013	10-30-13	0840	X		9	X	X	X	X	X
WS-007 (0.5-1.0) 103013	10-30-13	0900	X		9	X	X	X	X	X
WS-001 (0.5-1.0) 103013	10-30-13	0920	X		9	X	X	X	X	X
WS-002 (Surface) 103013	10-30-13	0940	X		9	X	X	X	X	X
WS-005 (Surface) 103013	10-30-13	1020	X		9	X	X	X	X	X
WS-014 (1.5-2.0) 103013	10-30-13	1230	X		9	X	X	X	X	X
WS-014 (5.5-6.0) 103013	10-30-13	1240	X		9	X	X	X	X	X
WS-012 (1.5-2.0) 103013	10-30-13	1250	X		9	X	X	X	X	X
WS-012 (5.0-5.5) 103013	10-30-13	1300	X		9	X	X	X	X	X
WS-010 (1.5-2.0) 103013	10-30-13	1310	X		9	X	X	X	X	X
WS-010 (3.5-4.0) 103013	10-30-13	1320	X		9	X	X	X	X	X

(7) Turnaround Time Requested (TAT) (please circle)

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

(8) Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
	10-30-13	1700			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by	10/31/13	0915

Temperature Upon Receipt 0.4-2.1 °C

Custody Seals Intact? (Yes) No

(9)

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 | For Eurofins Lancaster Laboratories Environmental use only: Group # 1430380 Sample # 72583 50-67

Instructions on reverse side correspond with circled numbers.

2 of 2

SCR#: _____

1 Client Information

Facility #/SID: Mayflower Pipe line 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: Clement Pagano / Ryan Lewis

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

5 Analyses Requested — Preservation Code

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	Total # of Containers	H VOCs 8260B	PAH 8270SIM	N RCRA Metals + hardness (Ni, V, Ca, Mg)	Diss Metals	H HEM Oil & Grease
WS-006(0.5-1.0)103013	10-30-13	1330	X		9	X	X	X	X	X
WS-011(1.5-2.0)103013	10-30-13	1340	X		9	X	X	X	X	X
WS-011(5.0-5.5)103013	10-30-13	1350	X		9	X	X	X	X	X
WS-EB-107-103013	10-30-13	1450	X		7	X	X	X	X	
WS-TB-190-103013	10-30-13	—	X		2	X				
DUP-WS-110-103013	10-30-13	—	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 preserve 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
Ryan Lewis	10-30-13	1700			
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by: Cashel	10/31/13	0915

Temperature Upon Receipt 0.4 -2.1 °C

Custody Seals Intact? (Yes) No

9

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Environmental Sample Administration Receipt Documentation Log

1430380

Client/Project: May flower

Date of Receipt: 10/31/13

Time of Receipt: 0915

Source Code: 60-1

Shipping Container Sealed: ~~YES~~ NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.9	TB	WI	Y	B	
2	↓	1.2	↓	↓	↓	↓	
3	↓	2.1	↓	↓	↓	↓	
4	↓	0.6	↓	↓	↓	↓	
5	↓	0.6	↓	↓	↓	↓	
6	↓	0.4	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 10/31/13 1020

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.