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

September 18, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/11/2013
Group Number: 1417922
SDG: PEL40
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)091013 Grab Surface Water	7192888
WS-014(5.5-6.0)091013 Grab Surface Water	7192889
WS-012(1.5-2.0)091013 Grab Surface Water	7192890
WS-012(5.0-5.5)091013 Grab Surface Water	7192891
WS-010(1.5-2.0)091013 Grab Surface Water	7192892
WS-010(3.5-4.0)091013 Grab Surface Water	7192893
WS-006(0.5-1.0)091013 Grab Surface Water	7192894
WS-005(Surface)091013 Grab Surface Water	7192895
WS-002(Surface)091013 Grab Surface Water	7192896
WS-011(1.5-2.0)091013 Grab Surface Water	7192897
WS-011(5.0-5.5)091013 Grab Surface Water	7192898
WS-018(Surface)091013 Grab Surface Water	7192899
WS-003(Surface)091013 Grab Surface Water	7192900
WS-007(0.5-1.0)091013 Grab Surface Water	7192901
WS-001(0.5-1.0)091013 Grab Surface Water	7192902
WS-EB-57-091013 Grab Water	7192903
WS-TB-146-091013 Water	7192904
DUP-WS-85-091013 Grab Surface Water	7192905

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth

ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer
ELECTRONIC COPY TO	ARCADIS	Attn: Rhiannon Parmalee
ELECTRONIC COPY TO	ARCADIS	Attn: Jamie Pritchard
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael L Sixsmith
ELECTRONIC COPY TO	ExxonMobil	Attn: Julie Foster

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1417922

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13255WAB026 (Sample number(s): 7192888-7192903, 7192905)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7192896, 7192897, 7192902

Sample #s: 7192888

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for MS/MSD or MS/DUP analysis.

Sample #s: 7192889, 7192890, 7192891, 7192892, 7192893, 7192894, 7192895, 7192898, 7192899, 7192900, 7192901, 7192903, 7192905

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

Sample #s: 7192896, 7192897, 7192902

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

EPA 1664A, Wet Chemistry

Batch #: 13260807902A (Sample number(s): 7192888-7192902, 7192905 UNSPK: 7192888)

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

Sample Description: WS-014(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192888
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10141 SDG#: PEL40-01

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

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

Sample Description: WS-014(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192888
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10141 SDG#: PEL40-01

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	29.6	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0360	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192888
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10141 SDG#: PEL40-01

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	6.84	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	3.04	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.	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	C132542AA	09/12/2013 03:17	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 03:17	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 17:28	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 09:43	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192889
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:40 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10142 SDG#: PEL40-02

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

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

Sample Description: WS-014(5.5-6.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192889
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:40 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10142 SDG#: PEL40-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	29.9	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	0.0671	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192889
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:40 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10142 SDG#: PEL40-02

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	6.92	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	3.08	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	C132542AA	09/12/2013 03:39	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 03:39	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 17:57	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 09:46	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192890
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10121 SDG#: PEL40-03

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

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

Sample Description: WS-012(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192890
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10121 SDG#: PEL40-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.3	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0750	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192890
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 08:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10121 SDG#: PEL40-03

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	7.03		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	3.10		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.	2.0	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132542AA	09/12/2013 04:02	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 04:02	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 18:27	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 09:21	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192891
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10122 SDG#: PEL40-04

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

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

Sample Description: WS-012(5.0-5.5)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192891
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10122 SDG#: PEL40-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.1	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	0.0828	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192891
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10122 SDG#: PEL40-04

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	6.97	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	3.08	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	C132542AA	09/12/2013 05:29	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 05:29	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 18:56	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 09:57	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192892
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10101 SDG#: PEL40-05

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

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

Sample Description: WS-010(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192892
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10101 SDG#: PEL40-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	29.7	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	0.142	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192892
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10101 SDG#: PEL40-05

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	6.87	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	3.06	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	C132542AA	09/12/2013 05:52	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 05:52	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 19:25	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:01	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192893
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 09:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10102 SDG#: PEL40-06

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

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

Sample Description: WS-010(3.5-4.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192893
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 09:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10102 SDG#: PEL40-06

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	29.6	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.135	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192893
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 09:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10102 SDG#: PEL40-06

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	6.84	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	3.05	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.	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	C132542AA	09/12/2013 06:14	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 06:14	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 19:55	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:05	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192894
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10006 SDG#: PEL40-07

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

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

Sample Description: WS-006(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192894
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10006 SDG#: PEL40-07

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.	0.030	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	30.4	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	0.118	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192894
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10006 SDG#: PEL40-07

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	7.04		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	3.12		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.2	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132542AA	09/12/2013 06:36	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 06:36	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 20:24	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:08	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192895
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 10:15 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10005 SDG#: PEL40-08

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

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

Sample Description: WS-005(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192895
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 10:15 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10005 SDG#: PEL40-08

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.	0.030	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	30.0	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	0.0730	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192895
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 10:15 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10005 SDG#: PEL40-08

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	7.18	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	2.92	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	C132542AA	09/12/2013 06:59	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 06:59	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 20:54	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:12	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192896
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10002 SDG#: PEL40-09

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-002(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192896
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10002 SDG#: PEL40-09

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.

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.8	0.033	0.20	1

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

Sample Description: WS-002(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192896
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10002 SDG#: PEL40-09

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0545		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	7.12		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	3.15		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.7	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132542AA	09/12/2013 07:21	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 07:21	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 21:23	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:15	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:49	Damary Valentin	1

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

Sample Description: WS-002(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192896
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10002 SDG#: PEL40-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192897
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10111 SDG#: PEL40-10

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

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

Sample Description: WS-011(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192897
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10111 SDG#: PEL40-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	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.

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.8	0.033	0.20	1

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

Sample Description: WS-011(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192897
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10111 SDG#: PEL40-10

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**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0406		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	7.04		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	3.21		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.	2.1	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132542AA	09/12/2013 07:43	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 07:43	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 21:52	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:19	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:51	Damary Valentin	1

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

Sample Description: WS-011(1.5-2.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192897
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10111 SDG#: PEL40-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192898
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10112 SDG#: PEL40-11

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-011(5.0-5.5)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192898
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10112 SDG#: PEL40-11

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.4	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	0.176	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192898
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10112 SDG#: PEL40-11

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	7.03		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	3.11		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.	2.3	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132542AA	09/12/2013 08:06	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 08:06	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 22:21	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:23	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-018(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192899
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:20 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10018 SDG#: PEL40-12

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

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

Sample Description: WS-018(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192899
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:20 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10018 SDG#: PEL40-12

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.	0.030	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	32.1	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	0.0738	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192899
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:20 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10018 SDG#: PEL40-12

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	7.33	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	3.34	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	C132542AA	09/12/2013 08:28	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 08:28	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 22:51	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:26	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192900
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10003 SDG#: PEL40-13

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

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

Sample Description: WS-003(Surface)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192900
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10003 SDG#: PEL40-13

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	31.4	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	0.0737	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192900
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10003 SDG#: PEL40-13

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	7.18	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	3.27	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	C132542AA	09/12/2013 08:50	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 08:50	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 23:20	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:30	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 08:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192901
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10007 SDG#: PEL40-14

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	5.5	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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192901
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10007 SDG#: PEL40-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.1	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.068		0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.12		0.010	0.051	1
08357	Anthracene	120-12-7	0.15		0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.26		0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.27		0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.80		0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.28		0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.26		0.010	0.051	1
08357	Chrysene	218-01-9	0.59		0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.082		0.010	0.051	1
08357	Fluoranthene	206-44-0	0.60		0.010	0.051	1
08357	Fluorene	86-73-7	0.055		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.33		0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.027	J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.027	J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.042	J	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.17		0.030	0.051	1
08357	Pyrene	129-00-0	0.61		0.010	0.051	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	21.3		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0594		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)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192901
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 11:50 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10007 SDG#: PEL40-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
01750	Calcium	7440-70-2	5.06	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0023 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0103 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.10	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0033 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	0.0049 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	C132542AA	09/12/2013 09:12	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 09:12	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/16/2013 23:49	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:41	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 09:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192902
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10001 SDG#: PEL40-15

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

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

Sample Description: WS-001(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192902
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10001 SDG#: PEL40-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	30.8	0.033	0.20	1

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

Sample Description: WS-001(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192902
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10001 SDG#: PEL40-15

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**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0734	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.11	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	3.16	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	C132551AA	09/12/2013 15:55	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132551AA	09/12/2013 15:55	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/17/2013 00:19	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:44	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 09:05	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192902
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:00 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10001 SDG#: PEL40-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	Michelle L Lalli	1

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

Sample Description: WS-EB-57-091013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192903
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10E57 SDG#: PEL40-16EB

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-57-091013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192903
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10E57 SDG#: PEL40-16EB

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.17	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
	The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	1.3	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0017 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-57-091013 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192903
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 12:30 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10E57 SDG#: PEL40-16EB

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	0.358	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	0.108	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	C132542AA	09/12/2013 02:33	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 02:33	Stephanie A Selis	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/17/2013 00:48	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:48	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 09:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-TB-146-091013 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192904
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10146 SDG#: PEL40-17TB

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-146-091013 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192904
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10146 SDG#: PEL40-17TB

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

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	C132542AA	09/12/2013 02:55	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132542AA	09/12/2013 02:55	Stephanie A Selis	1

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

Sample Description: DUP-WS-85-091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192905
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10D85 SDG#: PEL40-18FD*

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-85-091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192905
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10D85 SDG#: PEL40-18FD*

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	0.051	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	30.6	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.117	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-85-091013 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7192905
LL Group # 1417922
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/10/2013 by HVA

Submitted: 09/11/2013 09:45
Reported: 09/18/2013 09:36

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

10D85 SDG#: PEL40-18FD*

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	7.09		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	3.14		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.	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	C132551AA	09/12/2013 16:18	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132551AA	09/12/2013 16:18	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13255WAB026	09/17/2013 01:17	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13255WAB026	09/12/2013 16:00	David S Schrum	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 12:26	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
01750	Calcium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
01757	Magnesium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132551848002	09/13/2013 10:52	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132545713004	09/13/2013 09:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132551848002	09/12/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713004	09/12/2013 05:25	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13260807902A	09/17/2013 16:58	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: 1417922
Reported: 09/18/13 at 09:36 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: C132542AA	Sample number(s): 7192888-7192901,7192903-7192904								
Acetone	N.D.	3.0	5.0	ug/l	108	116	60-139	7	30
Allyl Chloride	N.D.	0.1	0.5	ug/l	74	76	61-130	3	30
Benzene	N.D.	0.1	0.5	ug/l	97	99	80-120	2	30
Bromobenzene	N.D.	0.1	0.5	ug/l	101	102	80-120	0	30
Bromochloromethane	N.D.	0.1	0.5	ug/l	106	108	80-125	2	30
Bromodichloromethane	N.D.	0.1	0.5	ug/l	101	102	80-120	1	30
Bromoform	N.D.	0.1	0.5	ug/l	115	113	73-128	2	30
Bromomethane	N.D.	0.1	0.5	ug/l	95	96	62-126	1	30
2-Butanone	N.D.	1.0	5.0	ug/l	104	115	70-130	9	30
n-Butylbenzene	N.D.	0.1	0.5	ug/l	96	97	80-120	1	30
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	96	97	80-120	1	30
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	94	95	80-120	2	30
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	106	106	80-129	0	30
Chlorobenzene	N.D.	0.1	0.5	ug/l	105	105	80-120	0	30
Chloroethane	N.D.	0.1	0.5	ug/l	89	90	68-120	2	30
Chloroform	N.D.	0.1	0.5	ug/l	104	104	80-120	1	30
Chloromethane	N.D.	0.2	0.5	ug/l	83	84	55-120	1	30
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	97	99	80-120	2	30
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	101	102	80-120	1	30
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	94	105	64-141	11	30
Dibromochloromethane	N.D.	0.1	0.5	ug/l	108	108	80-126	0	30
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	102	105	80-120	2	30
Dibromomethane	N.D.	0.1	0.5	ug/l	106	108	80-120	2	30
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103	103	80-120	0	30
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103	104	80-120	1	30
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102	103	80-120	1	30
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	97	98	39-120	1	30
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	94	95	80-120	1	30
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	104	103	80-127	0	30
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	101	101	80-123	1	30
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100	101	80-120	1	30
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103	104	80-120	0	30
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	112	113	75-145	1	30
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	100	101	80-120	1	30
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	100	100	80-120	0	30
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	90	92	75-122	2	30
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	100	101	80-121	1	30
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	92	94	80-123	2	30
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	93	95	80-120	1	30
Ethyl ether	N.D.	0.1	0.5	ug/l	103	103	59-130	0	30
Ethylbenzene	N.D.	0.1	0.5	ug/l	97	99	80-120	1	30
Freon 113	N.D.	0.2	0.5	ug/l	102	102	78-132	0	30
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	92	94	73-120	3	30

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 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	97	98	80-120	1	30
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	94	96	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	89	91	80-120	3	30
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	88	87	69-135	1	30
Methylene Chloride	N.D.	0.2	0.5	ug/l	104	105	80-120	1	30
n-Propylbenzene	N.D.	0.1	0.5	ug/l	96	97	80-120	1	30
Styrene	N.D.	0.1	0.5	ug/l	103	103	80-120	0	30
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	104	105	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	97	98	80-125	1	30
Tetrachloroethene	N.D.	0.1	0.5	ug/l	103	104	80-120	1	30
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	112	123	65-131	9	30
Toluene	N.D.	0.1	0.5	ug/l	100	101	80-120	1	30
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	71	78	63-120	9	30
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	79	83	70-120	5	30
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	100	100	80-120	0	30
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	106	106	80-120	1	30
Trichloroethene	N.D.	0.1	0.5	ug/l	103	103	80-120	0	30
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	103	103	77-132	0	30
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	107	107	80-120	0	30
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98	100	80-120	2	30
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97	98	80-120	1	30
Vinyl Chloride	N.D.	0.1	0.5	ug/l	90	91	65-127	2	30
Xylene (Total)	N.D.	0.1	0.5	ug/l	100	101	80-120	1	30
Batch number: C132551AA	Sample number(s): 7192902,7192905								
Acetone	N.D.	3.0	5.0	ug/l	115		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	76		61-130		
Benzene	N.D.	0.1	0.5	ug/l	103		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	111		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	103		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	105		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	98		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	110		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	118		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	110		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	91		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	109		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	84		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	103		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	120		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	103		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	103		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	106		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	105		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	105		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	108		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	121		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	102		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	103		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	105		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	89		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	99		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	114		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	105		73-120		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	85		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	77		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	106		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Styrene	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	111		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	93		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	112		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	119		65-131		
Toluene	N.D.	0.1	0.5	ug/l	106		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	112		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	106		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	110		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	118		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	102		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	94		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	106		80-120		
Batch number: 13255WAB026	Sample number(s): 7192888-7192903,7192905								
Acenaphthene	N.D.	0.010	0.050	ug/l	99	97	77-118	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	103	102	80-123	1	30
Anthracene	N.D.	0.010	0.050	ug/l	101	100	78-123	1	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	99	98	73-127	1	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	98	93	72-120	6	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	108	108	79-136	0	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	100	88	64-130	13	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	106	94	73-131	11	30
Chrysene	N.D.	0.010	0.050	ug/l	101	100	76-125	1	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	99	87	58-131	13	30
Fluoranthene	N.D.	0.010	0.050	ug/l	106	108	79-124	2	30
Fluorene	N.D.	0.010	0.050	ug/l	102	101	74-115	0	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	99	85	62-130	15	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	110	109	80-126	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	105	104	81-124	1	30
Naphthalene	N.D.	0.030	0.050	ug/l	103	102	75-120	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	99	97	75-120	1	30
Pyrene	N.D.	0.010	0.050	ug/l	97	94	71-130	3	30

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132545713004	Sample number(s): 7192888-7192903,7192905								
Mercury	N.D.	0.00006 0	0.00020	mg/l	103		80-120		
Batch number: 132551848002	Sample number(s): 7192888-7192903,7192905								
Arsenic	N.D.	0.0068	0.0200	mg/l	105		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	106		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	104		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	102		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	105		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	101		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	107		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	104		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	114		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	106		90-110		
Batch number: 13260807902A	Sample number(s): 7192888-7192902,7192905								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	96	93	78-114	3	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: C132542AA	Sample number(s): 7192888-7192901,7192903-7192904 UNSPK: 7192888								
Acetone	116	110	57-163	5	30				
Allyl Chloride	73	85	56-160	15	30				
Benzene	105	109	87-126	3	30				
Bromobenzene	102	109	80-123	6	30				
Bromochloromethane	109	120	82-125	9	30				
Bromodichloromethane	106	109	82-133	3	30				
Bromoform	113	119	60-138	5	30				
Bromomethane	105	109	66-130	4	30				
2-Butanone	102	99	56-160	3	30				
n-Butylbenzene	102	108	83-131	6	30				
sec-Butylbenzene	102	108	84-128	6	30				
tert-Butylbenzene	102	109	84-135	7	30				
Carbon Tetrachloride	122	124	81-148	2	30				
Chlorobenzene	111	115	78-133	3	30				
Chloroethane	99	103	70-139	4	30				
Chloroform	111	115	86-136	3	30				
Chloromethane	92	96	49-135	5	30				
2-Chlorotoluene	101	109	75-134	7	30				
4-Chlorotoluene	103	110	76-134	7	30				
1,2-Dibromo-3-chloropropane	102	95	43-143	6	30				
Dibromochloromethane	110	115	79-125	5	30				
1,2-Dibromoethane	104	109	84-127	4	30				
Dibromomethane	109	111	83-126	2	30				
1,2-Dichlorobenzene	104	111	83-117	6	30				
1,3-Dichlorobenzene	105	111	79-132	6	30				

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 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
1,4-Dichlorobenzene	106	110	79-120	5	30				
Dichlorodifluoromethane	117	117	28-136	0	30				
1,1-Dichloroethane	99	104	88-136	5	30				
1,2-Dichloroethane	111	113	82-135	2	30				
1,1-Dichloroethene	110	115	83-150	5	30				
cis-1,2-Dichloroethene	104	109	82-129	5	30				
trans-1,2-Dichloroethene	112	117	88-127	4	30				
Dichlorofluoromethane	127	133	81-161	4	30				
1,2-Dichloropropane	103	108	91-126	5	30				
1,3-Dichloropropane	100	105	80-127	5	30				
2,2-Dichloropropane	101	107	80-134	6	30				
1,1-Dichloropropene	110	114	86-139	3	30				
cis-1,3-Dichloropropene	92	98	74-132	7	30				
trans-1,3-Dichloropropene	94	99	71-128	6	30				
Ethyl ether	101	110	57-139	9	30				
Ethylbenzene	104	108	80-140	4	30				
Freon 113	118	119	77-147	1	30				
Hexachlorobutadiene	102	107	65-128	5	30				
Isopropylbenzene	105	110	81-133	5	30				
p-Isopropyltoluene	100	106	84-124	6	30				
Methyl Tertiary Butyl Ether	87	93	82-132	7	30				
4-Methyl-2-Pentanone	83	90	69-149	7	30				
Methylene Chloride	108	113	77-135	5	30				
n-Propylbenzene	101	107	79-131	6	30				
Styrene	108	112	63-151	3	30				
1,1,1,2-Tetrachloroethane	111	115	87-126	3	30				
1,1,2,2-Tetrachloroethane	95	101	75-131	5	30				
Tetrachloroethene	114	118	75-129	3	30				
Tetrahydrofuran	110	103	56-154	6	30				
Toluene	106	111	83-127	4	30				
1,2,3-Trichlorobenzene	75	86	73-125	13	30				
1,2,4-Trichlorobenzene	80	90	77-120	12	30				
1,1,1-Trichloroethane	112	116	85-140	3	30				
1,1,2-Trichloroethane	107	112	85-129	4	30				
Trichloroethene	113	115	85-131	2	30				
Trichlorofluoromethane	124	124	73-139	0	30				
1,2,3-Trichloropropane	104	109	76-120	5	30				
1,2,4-Trimethylbenzene	101	108	87-126	7	30				
1,3,5-Trimethylbenzene	102	107	89-129	5	30				
Vinyl Chloride	102	108	62-135	6	30				
Xylene (Total)	106	110	81-137	3	30				
Batch number: C132551AA	Sample number(s): 7192902,7192905 UNSPK: P192336								
Acetone	116	109	57-163	6	30				
Allyl Chloride	78	82	56-160	4	30				
Benzene	109	108	87-126	0	30				
Bromobenzene	107	106	80-123	0	30				
Bromochloromethane	114	114	82-125	0	30				
Bromodichloromethane	109	106	82-133	2	30				
Bromoform	107	105	60-138	2	30				
Bromomethane	104	104	66-130	0	30				
2-Butanone	106	101	56-160	4	30				

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 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
n-Butylbenzene	109	108	83-131	1	30				
sec-Butylbenzene	109	109	84-128	0	30				
tert-Butylbenzene	107	109	84-135	2	30				
Carbon Tetrachloride	128	128	81-148	0	30				
Chlorobenzene	117	116	78-133	1	30				
Chloroethane	99	99	70-139	0	30				
Chloroform	117	115	86-136	1	30				
Chloromethane	90	91	49-135	0	30				
2-Chlorotoluene	107	108	75-134	1	30				
4-Chlorotoluene	109	108	76-134	1	30				
1,2-Dibromo-3-chloropropane	116	114	43-143	2	30				
Dibromochloromethane	111	109	79-125	2	30				
1,2-Dibromoethane	107	106	84-127	1	30				
Dibromomethane	110	107	83-126	2	30				
1,2-Dichlorobenzene	113	111	83-117	1	30				
1,3-Dichlorobenzene	112	111	79-132	1	30				
1,4-Dichlorobenzene	112	110	79-120	2	30				
Dichlorodifluoromethane	108	111	28-136	2	30				
1,1-Dichloroethane	105	105	88-136	0	30				
1,2-Dichloroethane	113	111	82-135	2	30				
1,1-Dichloroethene	115	116	83-150	1	30				
cis-1,2-Dichloroethene	110	111	82-129	0	30				
trans-1,2-Dichloroethene	118	118	88-127	1	30				
Dichlorofluoromethane	127	128	81-161	1	30				
1,2-Dichloropropane	107	105	91-126	2	30				
1,3-Dichloropropane	102	102	80-127	0	30				
2,2-Dichloropropane	108	108	80-134	1	30				
1,1-Dichloropropene	116	115	86-139	1	30				
cis-1,3-Dichloropropene	89	91	74-132	3	30				
trans-1,3-Dichloropropene	90	92	71-128	1	30				
Ethyl ether	99	100	57-139	1	30				
Ethylbenzene	112	112	80-140	0	30				
Freon 113	125	124	77-147	1	30				
Hexachlorobutadiene	112	112	65-128	0	30				
Isopropylbenzene	114	113	81-133	1	30				
p-Isopropyltoluene	107	107	84-124	0	30				
Methyl Tertiary Butyl Ether	89	92	82-132	3	30				
4-Methyl-2-Pentanone	81	82	69-149	2	30				
Methylene Chloride	112	111	77-135	1	30				
n-Propylbenzene	106	106	79-131	0	30				
Styrene	111	109	63-151	2	30				
1,1,1,2-Tetrachloroethane	118	116	87-126	2	30				
1,1,2,2-Tetrachloroethane	97	98	75-131	1	30				
Tetrachloroethene	122	118	75-129	3	30				
Tetrahydrofuran	116	108	56-154	7	30				
Toluene	113	112	83-127	1	30				
1,2,3-Trichlorobenzene	100	100	73-125	1	30				
1,2,4-Trichlorobenzene	96	99	77-120	3	30				
1,1,1-Trichloroethane	122	120	85-140	2	30				
1,1,2-Trichloroethane	111	110	85-129	0	30				
Trichloroethene	119	118	85-131	0	30				
Trichlorofluoromethane	123	122	73-139	1	30				

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417922
Reported: 09/18/13 at 09:36 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
1,2,3-Trichloropropane	106	107	76-120	1	30				
1,2,4-Trimethylbenzene	109	108	87-126	0	30				
1,3,5-Trimethylbenzene	108	107	89-129	1	30				
Vinyl Chloride	100	102	62-135	2	30				
Xylene (Total)	114	113	81-137	1	30				
Batch number: 132545713004	Sample number(s): 7192888-7192903,7192905 UNSPK: 7192888 BKG: 7192888								
Mercury	105	105	80-120	0	20	N.D.	N.D.	0 (1)	20
Batch number: 132551848002	Sample number(s): 7192888-7192903,7192905 UNSPK: 7192890 BKG: 7192890								
Arsenic	109	106	81-123	3	20	N.D.	N.D.	0 (1)	20
Barium	108	104	78-118	3	20	0.0750	0.0729	3	20
Cadmium	105	102	83-116	3	20	N.D.	N.D.	0 (1)	20
Calcium	105	101	81-118	2	20	7.03	6.88	2	20
Chromium	105	103	81-120	2	20	N.D.	N.D.	0 (1)	20
Lead	108	103	75-125	5	20	N.D.	N.D.	0 (1)	20
Magnesium	104	100	75-125	1	20	3.10	3.03	2	20
Nickel	108	105	86-115	2	20	N.D.	N.D.	0 (1)	20
Selenium	106	101	75-125	4	20	N.D.	N.D.	0 (1)	20
Silver	115	113	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	108	106	90-111	2	20	N.D.	N.D.	0 (1)	20
Batch number: 13260807902A	Sample number(s): 7192888-7192902,7192905 UNSPK: 7192888								
HEM (oil & grease)	56*		78-114						

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge
Batch number: C132542AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7192888	107	107	96	94
7192889	107	105	97	94
7192890	107	106	96	94
7192891	106	106	96	94
7192892	108	105	97	95
7192893	107	105	97	94
7192894	107	105	97	95
7192895	107	104	97	94
7192896	107	107	98	94
7192897	108	106	96	94
7192898	109	106	96	93
7192899	109	107	96	93
7192900	109	105	96	94
7192901	108	106	96	95
7192903	107	105	97	94

*- 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: 1417922
Reported: 09/18/13 at 09:36 AM

Surrogate Quality Control

7192904	105	105	96	94
Blank	104	107	98	96
LCS	102	103	99	99
LCSD	102	105	97	100
MS	104	107	99	101
MSD	103	103	100	101
Limits:	77-114	74-113	77-110	78-110

Analysis Name: BTEX 25-ml purge
Batch number: C132551AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7192902	108	103	96	94
7192905	108	102	97	94
Blank	106	101	98	95
LCS	103	99	101	101
MS	104	101	101	101
MSD	103	99	100	101
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13255WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7192888	97	64	105
7192889	104	76	108
7192890	102	66	102
7192891	102	66	100
7192892	96	68	108
7192893	95	72	110
7192894	101	68	97
7192895	93	74	109
7192896	96	56*	108
7192897	95	60*	100
7192898	99	66	112
7192899	97	70	92
7192900	89	64	116
7192901	72	72	108
7192902	99	59*	103
7192903	102	104	105
7192905	105	66	102
Blank	104	101	110
LCS	100	104	107
LCSD	102	98	106
Limits:	44-137	62-141	51-136

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

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 Group # 1417922 Sample # 719 2888-905
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 Boshroe
Cost Center/AFE:
Consultant/Office: ARCADIS
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Hans Van Aller, Ryan Lewis

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

3 Grab / Composite

2 Sample Identification | Collected Date | Collected Time | Grab | Composite | Total # of Containers | **5 Analyses Requested** (Preservation Code: H / N / H) VOCs 8260B | PAH 8270 SIM | RCRA Metals + hardness Ni,Li,Ca,Mg | Diss. Metals | HEM oil & grease

Sample Identification	Date	Time	Grab	Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals + hardness Ni,Li,Ca,Mg	Diss. Metals	HEM oil & grease
WS-014 (1.5-2.0) 091013	9-10-13	0830	X		9	X	X	X	X	X
WS-014 (5.5-6.0) 091013	9-10-13	0840	X		9	X	X	X	X	X
WS-012 (1.5-2.0) 091013	9-10-13	0850	X		9	X	X	X	X	X
WS-012 (5.0-5.5) 091013	9-10-13	0900	X		9	X	X	X	X	X
WS-010 (1.5-2.0) 091013	9-10-13	0920	X		9	X	X	X	X	X
WS-010 (3.5-4.0) 091013	9-10-13	0930	X		9	X	X	X	X	X
WS-006 (0.5-1.0) 091013	9-10-13	0940	X		9	X	X	X	X	X
WS-005 (surface) 091013	9-10-13	1015	X		9	X	X	X	X	X
WS-002 (surface) 091013	9-10-13	1040	X		9	X	X	X	X	X
WS-011 (1.5-2.0) 091013	9-10-13	1050	X		9	X	X	X	X	X
WS-011 (5.0-5.5) 091013	9-10-13	1100	X		9	X	X	X	X	X
WS-018 (surface) 091013	9-10-13	1120	X		9	X	X	X	X	X

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

6 Remarks

Lab to filter and pressure diss. metals upon receipt

7 Turnaround Time Requested (TAT) (please circle)

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

8 Data Package (circle if required)
Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)
Locus EIM (default)
Other _____

Relinquished by: Ryan Lewis	Date: 9.10.13	Time: 1430	Received by:	Date:	Time: **9**
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:	Date: 9/11/13	Time: 0945

Temperature Upon Receipt 0.6-3.9 °C

Custody Seals Intact? (Yes) No

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 Group # 1417922 Sample # 719288-905

For Eurofins Lancaster Laboratories use only
Instructions on reverse side correspond with circled numbers.

2 of 2

SCR#: _____

1 Client Information

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

4 Matrix

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

3 Grab / Composite

5 Analyses Requested — Preservation Code

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

6 Remarks

2 Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOCs 8260B (H)	PAH 8270 SIM (N)	RCRA Metals + hardness Ni, Cu, Mg (N)	Diss Metals (N)	HEM Oil & Grease (H)
WS-003(Surface)091013	9-10-13	1130	X		9	X	X	X	X	X
WS-007(0.5-1.0)091013	9-10-13	1150	X		9	X	X	X	X	X
WS-001(0.5-1.0)091013	9-10-13	1200	X		9	X	X	X	X	X
WS-EB-57-091013	9-10-13	1230	X		7	X	X	X	X	
WS-TB-146-091013	9-10-13	—	X		2	X				
DUP-WS-85-091013	9-10-13	—	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
[signature]	9.10.13	1430			

Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____

Received by [signature] Date 9/11/13 Time 0945

Temperature Upon Receipt 0.6 - 3.9 °C

Custody Seals Intact? (Yes) No

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Environmental Sample Administration 1417922
Receipt Documentation Log

Client/Project: Mayflower Water

Date of Receipt: 9/11/13

Time of Receipt: 0945

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	3.9	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3		0.7					
4		0.7					
5		0.6					
6	↓	2.5	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [signature] 3647 **Date/Time:** 9/11/13 1045

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.