eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

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 17, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/10/2013
Group Number: 1417563
SDG: PEL38
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)090913 Grab Surface Water	7191406
WS-014(5.5-6.0)090913 Grab Surface Water	7191407
WS-012(1.5-2.0)090913 Grab Surface Water	7191408
WS-012(5.0-5.5)090913 Grab Surface Water	7191409
WS-010(1.5-2.0)090913 Grab Surface Water	7191410
WS-010(3.5-4.0)090913 Grab Surface Water	7191411
WS-006(0.5-1.0)090913 Grab Surface Water	7191412
WS-006(0.5-1.0)090913MS Grab Surface Water	7191413
WS-006(0.5-1.0)090913MSD Grab Surface Water	7191414
WS-006(0.5-1.0)090913DUP Grab Surface Water	7191415
WS-005(Surface)090913 Grab Surface Water	7191416
WS-002(Surface)090913 Grab Surface Water	7191417
WS-011(1.5-2.0)090913 Grab Surface Water	7191418
WS-011(5.0-5.5)090913 Grab Surface Water	7191419
WS-018(Surface)090913 Grab Surface Water	7191420
WS-003(Surface)090913 Grab Surface Water	7191421
WS-007(0.5-1.0)090913 Grab Surface Water	7191422
WS-001(0.5-1.0)090913 Grab Surface Water	7191423
WS-EB-56-090913 Grab Water	7191424
WS-TB-145-090913 Water	7191425

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 #: 1417563

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 included in this data set

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

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

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

Analysis Specific Comments:

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

Batch #: C132541AA (Sample number(s): 7191423 UNSPK: 7191423)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Dibromochloromethane, Bromoform, 1,2,3-Trichloropropane, 1,2-Dichlorobenzene

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13254WAD026 (Sample number(s): 7191406-7191414, 7191416-7191424 UNSPK: 7191412)

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

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7191414, 7191416, 7191417, 7191418, 7191419, 7191421, 7191423, MSD

Sample #s: 7191414, 7191416, 7191417, 7191418, 7191419, 7191421, 7191423

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 #: 13259807902A (Sample number(s): 7191406-7191423 UNSPK: 7191412 BKG: 7191412)

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

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: HEM (oil & grease)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: HEM (oil & grease)

Sample Description: WS-014(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191406
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09141 SDG#: PEL38-01

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191406
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09141 SDG#: PEL38-01

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	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1
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
	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	0.0306	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.08	0.0334	0.200	1

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

Sample Description: WS-014(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191406
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09141 SDG#: PEL38-01

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**	
07051	Chromium	7440-47-3	0.0045 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.19	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0032 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132532AA	09/11/2013 04:15	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 04:15	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 00:56	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:08	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-014(5.5-6.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191407
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09142 SDG#: PEL38-02

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191407
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09142 SDG#: PEL38-02

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	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
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	0.0388	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.98	0.0334	0.200	1

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

Sample Description: WS-014(5.5-6.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191407
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09142 SDG#: PEL38-02

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**	
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.	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	C132532AA	09/11/2013 04:37	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 04:37	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 01:26	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:12	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-012(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191408
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:00 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09121 SDG#: PEL38-03

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191408
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:00 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09121 SDG#: PEL38-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
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	0.0298	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.06	0.0334	0.200	1

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

Sample Description: WS-012(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191408
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:00 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09121 SDG#: PEL38-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	0.0021 J	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	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.6 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132532AA	09/11/2013 04:59	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 04:59	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 01:56	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:23	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-012(5.0-5.5)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191409
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:10 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09122 SDG#: PEL38-04

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191409
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:10 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09122 SDG#: PEL38-04

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.	0.011	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
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	32.5	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.378	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.60	0.0334	0.200	1

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

Sample Description: WS-012(5.0-5.5)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191409
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:10 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09122 SDG#: PEL38-04

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**	
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	3.29	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	C132532AA	09/11/2013 05:21	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 05:21	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 02:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:27	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-010(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191410
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:30 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09101 SDG#: PEL38-05

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191410
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:30 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09101 SDG#: PEL38-05

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.	0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.056	1
08357	Anthracene	120-12-7	N.D.	0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.056	1
08357	Chrysene	218-01-9	N.D.	0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.056	1
08357	Fluorene	86-73-7	N.D.	0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.056	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.056	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.056	1
08357	Pyrene	129-00-0	N.D.	0.011	0.056	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.2	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.113	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.19	0.0334	0.200	1

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

Sample Description: WS-010(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191410
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:30 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09101 SDG#: PEL38-05

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**	
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	3.22	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	C132532AA	09/11/2013 05:43	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 05:43	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 02:55	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:31	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-010(3.5-4.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191411
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09102 SDG#: PEL38-06

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191411
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09102 SDG#: PEL38-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	32.4	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	0.443	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.58	0.0334	0.200	1

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

Sample Description: WS-010(3.5-4.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191411
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:40 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09102 SDG#: PEL38-06

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**	
07051	Chromium	7440-47-3	0.0021 J	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	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132532AA	09/11/2013 06:06	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 06:06	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 03:25	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:35	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191412
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07BKG

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191412
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07BKG

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
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.9	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0071 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.173	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.35	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191412
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.30	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	C132532AA	09/11/2013 02:24	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 02:24	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/12/2013 23:28	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 14:45	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)090913MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191413
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MS

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	44	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.1	0.1	0.5	1
02898	Benzene	71-43-2	5.6	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.5	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.7	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.6	0.1	0.5	1
02898	Bromoform	75-25-2	6.0	0.1	0.5	1
02898	Bromomethane	74-83-9	5.4	0.1	0.5	1
02898	2-Butanone	78-93-3	40	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.4	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.8	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.3	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.8	0.1	0.5	1
02898	Chloroethane	75-00-3	5.1	0.1	0.5	1
02898	Chloroform	67-66-3	5.8	0.1	0.5	1
02898	Chloromethane	74-87-3	4.9	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.3	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.5	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.1	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.8	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.6	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.7	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.6	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.6	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.6	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	6.3	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.3	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.9	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.6	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	6.0	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.5	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.5	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.2	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.3	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.8	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.0	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.0	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.1	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.5	0.1	0.5	1
02898	Freon 113	76-13-1	6.2	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.3	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.5	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.3	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.7	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	22	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.7	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)090913MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191413
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MS

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	5.4	0.1	0.5	1
02898	Styrene	100-42-5	5.6	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.7	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.1	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.9	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	28	2.0	5.0	1
02898	Toluene	108-88-3	5.7	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.1	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.4	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.9	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.9	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.2	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.5	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.4	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.4	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.90	0.010	0.052	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.052	1
08357	Anthracene	120-12-7	0.29	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	0.80	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.33	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.89	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.73	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.85	0.010	0.052	1
08357	Chrysene	218-01-9	0.92	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.87	0.010	0.052	1
08357	Fluoranthene	206-44-0	1.0	0.010	0.052	1
08357	Fluorene	86-73-7	1.0	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.82	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.052	1
08357	Naphthalene	91-20-3	1.0	0.031	0.052	1
08357	Phenanthrene	85-01-8	1.0	0.031	0.052	1
08357	Pyrene	129-00-0	0.84	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	50.2	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.159	0.0068	0.0200	1
07046	Barium	7440-39-3	2.23	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0507	0.00076	0.0050	1
01750	Calcium	7440-70-2	11.3	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)090913MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191413
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	0.198	0.0016	0.0150	1
07055	Lead	7439-92-1	0.154	0.0047	0.0150	1
01757	Magnesium	7439-95-4	5.32	0.0167	0.100	1
07061	Nickel	7440-02-0	0.521	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.152	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0508	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.518	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.00097	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	4.3 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	C132532AA	09/11/2013 02:46	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 02:46	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/12/2013 23:57	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 14:57	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)090913MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191414
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MSD

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	39	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.2	0.1	0.5	1
02898	Benzene	71-43-2	5.5	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.5	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.6	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.4	0.1	0.5	1
02898	Bromoform	75-25-2	5.9	0.1	0.5	1
02898	Bromomethane	74-83-9	5.4	0.1	0.5	1
02898	2-Butanone	78-93-3	37	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.3	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.7	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.2	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.7	0.1	0.5	1
02898	Chloroethane	75-00-3	5.2	0.1	0.5	1
02898	Chloroform	67-66-3	5.7	0.1	0.5	1
02898	Chloromethane	74-87-3	5.0	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.4	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.5	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.8	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.7	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.5	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.5	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.5	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.5	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.6	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	6.3	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.2	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.7	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	5.5	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.8	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	6.4	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.4	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	5.3	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	5.3	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.7	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.0	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.0	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	6.0	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.1	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.4	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.3	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.7	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	23	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.6	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)090913MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191414
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MSD

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	5.4	0.1	0.5	1
02898	Styrene	100-42-5	5.6	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.7	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	5.2	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	5.8	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	26	2.0	5.0	1
02898	Toluene	108-88-3	5.6	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.3	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.5	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	5.7	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.8	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	6.1	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.6	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.4	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.4	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	17	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.93	0.011	0.053	1
08357	Acenaphthylene	208-96-8	1.1	0.011	0.053	1
08357	Anthracene	120-12-7	0.29	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	0.79	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	0.31	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.89	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	0.69	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	0.83	0.011	0.053	1
08357	Chrysene	218-01-9	0.91	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	0.82	0.011	0.053	1
08357	Fluoranthene	206-44-0	1.1	0.011	0.053	1
08357	Fluorene	86-73-7	1.1	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.79	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.011	0.053	1
08357	Naphthalene	91-20-3	1.1	0.032	0.053	1
08357	Phenanthrene	85-01-8	1.0	0.032	0.053	1
08357	Pyrene	129-00-0	0.84	0.011	0.053	1

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	50.0	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.26	0.00033	0.0050	1

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

Sample Description: WS-006(0.5-1.0)090913MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191414
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07049	Cadmium	7440-43-9	0.0508	0.00076	0.0050	1
01750	Calcium	7440-70-2	11.3	0.0334	0.200	1
07051	Chromium	7440-47-3	0.199	0.0016	0.0150	1
07055	Lead	7439-92-1	0.154	0.0047	0.0150	1
01757	Magnesium	7439-95-4	5.30	0.0167	0.100	1
07061	Nickel	7440-02-0	0.518	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.154	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0513	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.522	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.00096	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	19.4	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	C132532AA	09/11/2013 03:08	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 03:08	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 00:27	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:00	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)090913MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191414
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)090913DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191415
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 09:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09006 SDG#: PEL38-07DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.3	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0079 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.170	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.21	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	3.23	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.4 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 14:53	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-005(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191416
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09005 SDG#: PEL38-08

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191416
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09005 SDG#: PEL38-08

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.2	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.052	1
08357	Anthracene	120-12-7	N.D.		0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.052	1
08357	Chrysene	218-01-9	N.D.		0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.		0.010	0.052	1
08357	Fluorene	86-73-7	N.D.		0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.		0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.		0.031	0.052	1
08357	Pyrene	129-00-0	N.D.		0.010	0.052	1
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.						
Metals	**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	0.0979		0.00033	0.0050	1

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

Sample Description: WS-005(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191416
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09005 SDG#: PEL38-08

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.43	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.	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	C132532AA	09/11/2013 06:28	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 06:28	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 03:54	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:39	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191416
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09005 SDG#: PEL38-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-002(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191417
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09002 SDG#: PEL38-09

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191417
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09002 SDG#: PEL38-09

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.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1
	The 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	32.9	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	0.0357	0.00033	0.0050	1

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

Sample Description: WS-002(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191417
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09002 SDG#: PEL38-09

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.53	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	3.42	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	C132532AA	09/11/2013 06:50	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 06:50	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 04:24	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:43	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191417
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09002 SDG#: PEL38-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-011(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191418
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:55 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09111 SDG#: PEL38-10

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191418
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:55 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09111 SDG#: PEL38-10

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.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

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

Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	32.4	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0073 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0317	0.00033	0.0050	1

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

Sample Description: WS-011(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191418
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:55 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09111 SDG#: PEL38-10

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.36	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.41	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132532AA	09/11/2013 07:13	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 07:13	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 04:53	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:46	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 08:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191418
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:55 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09111 SDG#: PEL38-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-011(5.0-5.5)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191419
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09112 SDG#: PEL38-11

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191419
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09112 SDG#: PEL38-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.					
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.6	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	0.0666	0.00033	0.0050	1

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

Sample Description: WS-011(5.0-5.5)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191419
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09112 SDG#: PEL38-11

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**	
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	7.22		0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.29		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	C132532AA	09/11/2013 07:35	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 07:35	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 05:23	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:50	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191419
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09112 SDG#: PEL38-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-018(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191420
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:25 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09018 SDG#: PEL38-12

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191420
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:25 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09018 SDG#: PEL38-12

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	0.2	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.		0.011	0.054	1
08357	Anthracene	120-12-7	N.D.		0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.011	0.054	1
08357	Chrysene	218-01-9	N.D.		0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.		0.011	0.054	1
08357	Fluorene	86-73-7	N.D.		0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.		0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.		0.032	0.054	1
08357	Pyrene	129-00-0	N.D.		0.011	0.054	1
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.3		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	0.0832		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

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

Sample Description: WS-018(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191420
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:25 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09018 SDG#: PEL38-12

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**	
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	3.29	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	C132532AA	09/11/2013 07:57	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 07:57	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 05:52	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:54	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-003(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191421
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09003 SDG#: PEL38-13

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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191421
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09003 SDG#: PEL38-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	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 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	32.3	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	0.0749	0.00033	0.0050	1

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

Sample Description: WS-003(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191421
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09003 SDG#: PEL38-13

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.35	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	3.39	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	C132532AA	09/11/2013 08:19	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 08:19	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 06:22	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 15:58	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191421
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:50 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09003 SDG#: PEL38-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-007(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191422
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09007 SDG#: PEL38-14

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	5.3		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	0.1	J	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	0.1	J	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)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191422
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09007 SDG#: PEL38-14

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	N.D.		0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.		0.011	0.057	1
08357	Anthracene	120-12-7	N.D.		0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.011	0.057	1
08357	Chrysene	218-01-9	N.D.		0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.		0.011	0.057	1
08357	Fluorene	86-73-7	N.D.		0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.		0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.		0.034	0.057	1
08357	Pyrene	129-00-0	N.D.		0.011	0.057	1
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	25.7		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0133	J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.186		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	6.44		0.0334	0.200	1

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

Sample Description: WS-007(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191422
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:05 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09007 SDG#: PEL38-14

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**	
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	2.35	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0030 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0026 J	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0027 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	C132532AA	09/11/2013 08:41	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 08:41	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 06:52	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 16:09	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-001(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191423
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:15 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09001 SDG#: PEL38-15

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

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

Sample Description: WS-001(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191423
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:15 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09001 SDG#: PEL38-15

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.3	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.		0.011	0.056	1
08357	Anthracene	120-12-7	N.D.		0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.011	0.056	1
08357	Chrysene	218-01-9	N.D.		0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.		0.011	0.056	1
08357	Fluorene	86-73-7	N.D.		0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.011	0.056	1
08357	Naphthalene	91-20-3	N.D.		0.033	0.056	1
08357	Phenanthrene	85-01-8	N.D.		0.033	0.056	1
08357	Pyrene	129-00-0	N.D.		0.011	0.056	1

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

Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	31.5		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.192		0.00033	0.0050	1

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

Sample Description: WS-001(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191423
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:15 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09001 SDG#: PEL38-15

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.29	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	3.23	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	C132541AA	09/11/2013 12:07	Kerri E Legerlotz	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132541AA	09/11/2013 12:07	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 07:21	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 16:13	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)090913 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191423
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:15 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09001 SDG#: PEL38-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13259807902A	09/16/2013 18:05	Michelle L Lalli	1

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

Sample Description: WS-EB-56-090913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191424
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09E56 SDG#: PEL38-16EB

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	0.2	J	0.2	0.5	1

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

Sample Description: WS-EB-56-090913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191424
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09E56 SDG#: PEL38-16EB

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	0.055	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.055	1
08357	Anthracene	120-12-7	N.D.	0.011	0.055	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.055	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.055	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.055	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.055	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.055	1
08357	Chrysene	218-01-9	N.D.	0.011	0.055	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.055	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.055	1
08357	Fluorene	86-73-7	N.D.	0.011	0.055	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.013 J	0.011	0.055	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.055	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.055	1
08357	Naphthalene	91-20-3	0.21	0.033	0.055	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.055	1
08357	Pyrene	129-00-0	N.D.	0.011	0.055	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	N.D.	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	N.D.	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	N.D.	0.0334	0.200	1

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

Sample Description: WS-EB-56-090913 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191424
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:45 by DD

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09E56 SDG#: PEL38-16EB

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**	
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	N.D.	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	C132532AA	09/11/2013 01:40	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 01:40	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13254WAD026	09/13/2013 07:51	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13254WAD026	09/11/2013 17:00	JoElla L Rice	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132566256001	09/13/2013 07:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132531848008	09/12/2013 16:17	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132535713009	09/12/2013 09:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132531848008	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132535713009	09/11/2013 15:50	Nelli S Markaryan	1

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

Sample Description: WS-TB-145-090913 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191425
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:55

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09145 SDG#: PEL38-17TB*

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-145-090913 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191425
LL Group # 1417563
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:55

Submitted: 09/10/2013 09:35
Reported: 09/17/2013 13:09

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

09145 SDG#: PEL38-17TB*

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

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	C132532AA	09/11/2013 02:02	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C132532AA	09/11/2013 02:02	Brett W Kenyon	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417563
Reported: 09/17/13 at 01:09 PM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: C132532AA	Sample number(s): 7191406-7191414,7191416-7191422,7191424-7191425								
Acetone	N.D.	3.0	5.0	ug/l	106		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	78		61-130		
Benzene	N.D.	0.1	0.5	ug/l	100		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	106		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	100		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	113		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	97		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	109		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	105		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	91		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	103		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	89		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	99		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	98		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	107		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	106		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	104		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	97		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	104		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	111		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	101		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	91		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	102		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	97		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	96		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	91		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	102		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	91		73-120		

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417563
Reported: 09/17/13 at 01:09 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	97		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	93		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	88		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	104		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Styrene	N.D.	0.1	0.5	ug/l	103		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	104		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	99		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	119		65-131		
Toluene	N.D.	0.1	0.5	ug/l	102		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	72		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	80		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	100		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	105		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	100		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	106		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	99		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	101		80-120		
Batch number: C132541AA	Sample number(s): 7191423								
Acetone	N.D.	3.0	5.0	ug/l	111		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	71		61-130		
Benzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	109		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	104		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	115		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	96		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	107		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	109		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	89		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	105		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	84		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	94		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	105		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	110		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	105		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	108		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	104		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	94		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	111		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	98		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	100		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: 1417563
Reported: 09/17/13 at 01:09 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	114		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	92		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	99		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	91		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	93		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	82		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	102		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	88		73-120		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	91		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	88		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	85		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	104		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	93		80-120		
Styrene	N.D.	0.1	0.5	ug/l	103		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	94		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	117		65-131		
Toluene	N.D.	0.1	0.5	ug/l	100		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	72		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	76		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	108		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	103		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	107		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	106		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	90		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	100		80-120		
Batch number: 13254WAD026	Sample number(s): 7191406-7191414,7191416-7191424								
Acenaphthene	N.D.	0.010	0.050	ug/l	94		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	97		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	95		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	94		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	92		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	97		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	94		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	95		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	96		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	91		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	97		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	95		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	90		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	101		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	96		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	93		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	93		71-130		

*- 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: 1417563
Reported: 09/17/13 at 01:09 PM

Analysis Name	Blank Result		Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132531848008	Sample number(s): 7191406-7191424									
Arsenic	N.D.		0.0068	0.0200	mg/l	101		90-113		
Barium	N.D.		0.00033	0.0050	mg/l	106		90-110		
Cadmium	N.D.		0.00076	0.0050	mg/l	103		90-112		
Calcium	N.D.		0.0334	0.200	mg/l	104		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	103		90-110		
Nickel	N.D.		0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.		0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.		0.0021	0.0050	mg/l	104		80-120		
Vanadium	N.D.		0.0020	0.0050	mg/l	105		90-110		
Batch number: 132535713009	Sample number(s): 7191406-7191424									
Mercury	N.D.		0.00006 0	0.00020	mg/l	98		80-120		
Batch number: 13259807902A	Sample number(s): 7191406-7191423									
HEM (oil & grease)	1.6	J	1.4	5.0	mg/l	91	78	78-114	16	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: C132532AA	Sample number(s): 7191406-7191414,7191416-7191422,7191424-7191425 UNSPK: 7191412								
Acetone	117	105	57-163	11	30				
Allyl Chloride	83	83	56-160	1	30				
Benzene	112	109	87-126	2	30				
Bromobenzene	110	109	80-123	0	30				
Bromochloromethane	115	112	82-125	3	30				
Bromodichloromethane	111	108	82-133	3	30				
Bromoform	120	118	60-138	2	30				
Bromomethane	107	108	66-130	1	30				
2-Butanone	106	99	56-160	7	30				
n-Butylbenzene	107	107	83-131	0	30				
sec-Butylbenzene	109	108	84-128	1	30				
tert-Butylbenzene	116	114	84-135	2	30				
Carbon Tetrachloride	127	123	81-148	3	30				
Chlorobenzene	116	114	78-133	2	30				
Chloroethane	101	104	70-139	2	30				
Chloroform	116	113	86-136	3	30				
Chloromethane	99	99	49-135	0	30				
2-Chlorotoluene	107	108	75-134	1	30				
4-Chlorotoluene	110	110	76-134	0	30				
1,2-Dibromo-3-chloropropane	101	96	43-143	5	30				
Dibromochloromethane	116	114	79-125	2	30				
1,2-Dibromoethane	111	110	84-127	1	30				
Dibromomethane	113	110	83-126	3	30				
1,2-Dichlorobenzene	111	110	83-117	2	30				
1,3-Dichlorobenzene	112	110	79-132	2	30				

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1417563
Reported: 09/17/13 at 01:09 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,4-Dichlorobenzene	111	111	79-120	0	30				
Dichlorodifluoromethane	126	125	28-136	1	30				
1,1-Dichloroethane	105	105	88-136	1	30				
1,2-Dichloroethane	113	113	82-135	0	30				
1,1-Dichloroethene	119	115	83-150	4	30				
cis-1,2-Dichloroethene	111	110	82-129	1	30				
trans-1,2-Dichloroethene	120	116	88-127	4	30				
Dichlorofluoromethane	129	128	81-161	1	30				
1,2-Dichloropropane	110	109	91-126	1	30				
1,3-Dichloropropane	105	105	80-127	0	30				
2,2-Dichloropropane	107	106	80-134	1	30				
1,1-Dichloropropene	117	115	86-139	2	30				
cis-1,3-Dichloropropene	99	100	74-132	1	30				
trans-1,3-Dichloropropene	100	101	71-128	1	30				
Ethyl ether	82	85	57-139	4	30				
Ethylbenzene	110	108	80-140	2	30				
Freon 113	123	120	77-147	3	30				
Hexachlorobutadiene	105	103	65-128	2	30				
Isopropylbenzene	110	109	81-133	1	30				
p-Isopropyltoluene	106	105	84-124	1	30				
Methyl Tertiary Butyl Ether	94	95	82-132	0	30				
4-Methyl-2-Pentanone	89	91	69-149	2	30				
Methylene Chloride	113	112	77-135	1	30				
n-Propylbenzene	108	107	79-131	1	30				
Styrene	112	111	63-151	1	30				
1,1,1,2-Tetrachloroethane	114	113	87-126	1	30				
1,1,2,2-Tetrachloroethane	101	104	75-131	2	30				
Tetrachloroethene	118	117	75-129	1	30				
Tetrahydrofuran	112	105	56-154	7	30				
Toluene	114	112	83-127	2	30				
1,2,3-Trichlorobenzene	82	86	73-125	5	30				
1,2,4-Trichlorobenzene	88	89	77-120	1	30				
1,1,1-Trichloroethane	117	115	85-140	2	30				
1,1,2-Trichloroethane	111	112	85-129	1	30				
Trichloroethene	118	116	85-131	2	30				
Trichlorofluoromethane	124	122	73-139	2	30				
1,2,3-Trichloropropane	111	111	76-120	1	30				
1,2,4-Trimethylbenzene	109	108	87-126	1	30				
1,3,5-Trimethylbenzene	109	108	89-129	1	30				
Vinyl Chloride	108	108	62-135	0	30				
Xylene (Total)	112	111	81-137	1	30				
Batch number: C132541AA	Sample number(s): 7191423 UNSPK: 7191423								
Acetone	134	110	57-163	18	30				
Allyl Chloride	73	78	56-160	6	30				
Benzene	108	104	87-126	4	30				
Bromobenzene	116	109	80-123	6	30				
Bromochloromethane	111	111	82-125	1	30				
Bromodichloromethane	121	108	82-133	11	30				
Bromoform	141*	124	60-138	12	30				
Bromomethane	99	105	66-130	7	30				
2-Butanone	130	112	56-160	15	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: 1417563
Reported: 09/17/13 at 01:09 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
n-Butylbenzene	113	105	83-131	6	30				
sec-Butylbenzene	112	105	84-128	7	30				
tert-Butylbenzene	113	106	84-135	6	30				
Carbon Tetrachloride	126	120	81-148	5	30				
Chlorobenzene	124	114	78-133	8	30				
Chloroethane	92	99	70-139	8	30				
Chloroform	119	111	86-136	7	30				
Chloromethane	85	94	49-135	10	30				
2-Chlorotoluene	113	105	75-134	6	30				
4-Chlorotoluene	116	108	76-134	7	30				
1,2-Dibromo-3-chloropropane	136	108	43-143	23	30				
Dibromochloromethane	131*	116	79-125	12	30				
1,2-Dibromoethane	123	111	84-127	10	30				
Dibromomethane	126	110	83-126	14	30				
1,2-Dichlorobenzene	120*	111	83-117	8	30				
1,3-Dichlorobenzene	119	111	79-132	7	30				
1,4-Dichlorobenzene	119	111	79-120	7	30				
Dichlorodifluoromethane	111	116	28-136	4	30				
1,1-Dichloroethane	101	99	88-136	2	30				
1,2-Dichloroethane	124	111	82-135	11	30				
1,1-Dichloroethene	107	109	83-150	1	30				
cis-1,2-Dichloroethene	110	105	82-129	5	30				
trans-1,2-Dichloroethene	111	111	88-127	1	30				
Dichlorofluoromethane	118	126	81-161	6	30				
1,2-Dichloropropane	111	104	91-126	7	30				
1,3-Dichloropropane	116	106	80-127	9	30				
2,2-Dichloropropane	103	101	80-134	3	30				
1,1-Dichloropropene	112	108	86-139	3	30				
cis-1,3-Dichloropropene	103	96	74-132	7	30				
trans-1,3-Dichloropropene	110	98	71-128	11	30				
Ethyl ether	72	80	57-139	10	30				
Ethylbenzene	115	108	80-140	6	30				
Freon 113	115	113	77-147	2	30				
Hexachlorobutadiene	113	104	65-128	9	30				
Isopropylbenzene	116	108	81-133	7	30				
p-Isopropyltoluene	111	104	84-124	7	30				
Methyl Tertiary Butyl Ether	92	89	82-132	3	30				
4-Methyl-2-Pentanone	105	91	69-149	14	30				
Methylene Chloride	107	106	77-135	1	30				
n-Propylbenzene	111	105	79-131	5	30				
Styrene	123	112	63-151	10	30				
1,1,1,2-Tetrachloroethane	126	115	87-126	9	30				
1,1,2,2-Tetrachloroethane	115	104	75-131	10	30				
Tetrachloroethene	121	113	75-129	7	30				
Tetrahydrofuran	134	114	56-154	16	30				
Toluene	114	106	83-127	6	30				
1,2,3-Trichlorobenzene	88	84	73-125	4	30				
1,2,4-Trichlorobenzene	93	88	77-120	5	30				
1,1,1-Trichloroethane	115	112	85-140	3	30				
1,1,2-Trichloroethane	127	112	85-129	12	30				
Trichloroethene	119	112	85-131	6	30				
Trichlorofluoromethane	116	119	73-139	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: 1417563
Reported: 09/17/13 at 01:09 PM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,2,3-Trichloropropane	129*	114	76-120	12	30				
1,2,4-Trimethylbenzene	113	106	87-126	6	30				
1,3,5-Trimethylbenzene	112	106	89-129	6	30				
Vinyl Chloride	94	104	62-135	11	30				
Xylene (Total)	118	109	81-137	7	30				
Batch number: 13254WAD026	Sample number(s): 7191406-7191414,7191416-7191424 UNSPK: 7191412								
Acenaphthene	86	88	47-136	3	30				
Acenaphthylene	100	101	33-146	3	30				
Anthracene	28*	27*	69-119	0	30				
Benzo(a)anthracene	77	75	37-150	1	30				
Benzo(a)pyrene	32*	29*	64-123	6	30				
Benzo(b)fluoranthene	86	84	33-152	0	30				
Benzo(g,h,i)perylene	70	65	36-138	6	30				
Benzo(k)fluoranthene	82	79	31-142	2	30				
Chrysene	89	86	34-135	1	30				
Dibenz(a,h)anthracene	83	77	17-134	6	30				
Fluoranthene	100	102	39-147	4	30				
Fluorene	99	101	38-149	3	30				
Indeno(1,2,3-cd)pyrene	79	74	29-143	4	30				
1-Methylnaphthalene	107	108	49-152	2	30				
2-Methylnaphthalene	103	104	51-146	3	30				
Naphthalene	101	102	58-131	3	30				
Phenanthrene	97	99	48-140	4	30				
Pyrene	81	80	59-125	1	30				
Batch number: 132531848008	Sample number(s): 7191406-7191424 UNSPK: 7191412 BKG: 7191412								
Arsenic	101	100	81-123	1	20	0.0071 J	0.0079 J	11 (1)	20
Barium	103	104	78-118	2	20	0.173	0.170	1	20
Cadmium	101	102	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	100	98	81-118	0	20	7.35	7.21	2	20
Chromium	99	99	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	103	103	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	101	100	75-125	0	20	3.30	3.23	2	20
Nickel	104	104	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	101	102	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	102	103	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	104	104	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132535713009	Sample number(s): 7191406-7191424 UNSPK: 7191412 BKG: 7191412								
Mercury	97	96	80-120	1	20	N.D.	N.D.	0 (1)	20
Batch number: 13259807902A	Sample number(s): 7191406-7191423 UNSPK: 7191412 BKG: 7191412								
HEM (oil & grease)	10*	40*	78-114	127*	29	N.D.	1.4 J	200* (1)	18

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.

*- 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: 1417563
Reported: 09/17/13 at 01:09 PM

Surrogate Quality Control

Analysis Name: BTEX 25-ml purge
Batch number: C132532AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7191406	105	105	97	95
7191407	105	106	97	94
7191408	105	104	97	94
7191409	106	103	97	96
7191410	106	106	96	94
7191411	107	104	97	94
7191412	105	105	97	95
7191413	103	103	99	100
7191414	103	104	100	100
7191416	107	106	97	94
7191417	107	107	97	95
7191418	108	104	96	94
7191419	109	105	96	94
7191420	109	105	96	94
7191421	108	106	97	94
7191422	107	104	96	94
7191424	105	106	97	95
7191425	106	104	97	95
Blank	102	104	97	96
LCS	101	101	100	99
MS	103	103	99	100
MSD	103	104	100	100
Limits:	77-114	74-113	77-110	78-110

Analysis Name: BTEX 25-ml purge
Batch number: C132541AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7191423	107	104	97	95
Blank	107	105	97	95
LCS	104	103	100	101
MS	104	104	100	101
MSD	104	103	100	101
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13254WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7191406	93	64	96
7191407	98	72	100
7191408	96	68	100
7191409	89	69	87
7191410	98	65	101
7191411	94	62	99
7191412	96	63	100
7191413	97	64	103
7191414	100	59*	105

*- 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: 1417563
Reported: 09/17/13 at 01:09 PM

Surrogate Quality Control

7191416	92	47*	100
7191417	88	45*	96
7191418	93	55*	99
7191419	94	54*	100
7191420	94	64	98
7191421	69	57*	81
7191422	76	80	96
7191423	94	54*	98
7191424	98	94	99
Blank	95	98	99
LCS	91	96	98
MS	97	64	103
MSD	100	59*	105
Limits:	44-137	62-141	51-136

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

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1417563 Sample # 7191406-25
Instructions on reverse side correspond with circled numbers.

1 of 2

SCR#: _____

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe | Cost Center/AFE:
Consultant/Office: ARCADIS
Consultant PM: Steve Barrick | Consultant Phone #: 919-302-6799
Sampler: Dave Frost Ryan Lewis

3 Grab / Composite

4 Matrix: Soil / Sediment / Water (Ground, Potable, NPDES, Surface) / Oil / Air

5 Analyses Requested — Preservation Code

2 Sample Identification	Collected Date	Collected Time	Grab	Composite	Soil/Sed	Water	Oil	Air	Total # of Containers	VOCs 8260B (H)	PAH 8270 SIM (H)	RCRA Metals Hg, Cr, Pb, Ni, Cu, Zn, Ag, As, Ba, Cd, Se (N)	Diss. Metals (N)	HEM Oil & Grease (H)
WS-014 (1.5-2.0) 090913	9-9-2013	0840	X			X			9	X	X	X	X	X
WS-014 (5.5-6.0) 090913	9-9-2013	0850	X			X			9	X	X	X	X	X
WS-012 (1.5-2.0) 090913	9-9-2013	0900	X			X			9	X	X	X	X	X
WS-012 (5.0-5.5) 090913	9-9-2013	0910	X			X			9	X	X	X	X	X
WS-010 (1.5-2.0) 090913	9-9-2013	0930	X			X			9	X	X	X	X	X
WS-010 (3.5-4.0) 090913	9-9-2013	0940	X			X			9	X	X	X	X	X
WS-006 (0.5-1.0) 090913	9-9-2013	0950	X			X			9	X	X	X	X	X
WS-005 (Surface) 090913	9-9-2013	1015	X			X			9	X	X	X	X	X
WS-002 (Surface) 090913	9-9-2013	1045	X			X			9	X	X	X	X	X
WS-011 (1.5-2.0) 090913	9-9-2013	1055	X			X			9	X	X	X	X	X
WS-011 (5.0-5.5) 090913	9-9-2013	1105	X			X			9	X	X	X	X	X
WS-018 (Surface) 090913	9-9-2013	1125	X			X			9	X	X	X	X	X

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

6 Remarks
Lab to filter and pressure Diss Metals upon receipt

7 Turnaround Time Requested (TAT) (please circle)
Standard | (5 day) | 4 day
72 hour | 48 hour | 24 hour

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

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

Relinquished by	Date	Time	Received by	Date	Time
[signature]	9-9-13	1430	[signature]		**9**

Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____

Received by [signature] Date 9-10-13 Time 935

Temperature Upon Receipt 1.0-2.1 °C

Custody Seals Intact? (Yes) No

ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1417563 Sample # 7191406-25
Instructions on reverse side correspond with circled numbers.

SCR#: 2 of 2

(1) Client Information

Facility #/SID	Mayflower Pipeline Incident
Site Address	Mayflower, AR
ExxonMobil PM	Scott Bushroe
Cost Center/AFE	
Consultant/Office	ARCADIS
Consultant PM	Steve Barrick
Consultant Phone #	919-302-6799
Sampler	Dave Drost / Ryan Lewis

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

(2) Sample Identification	Collected Date	Collected Time	(3) Grab	Composite	Total # of Containers	VOCs 8260B	PAH 8270 SIM	RCRA Metals Hg,Cr,Pb,Ni,Cd,Ag,As,Ba,Se	Diss Metals	HEM Oil & Grease
WS-003 (Surface) 090913	9-9-13	1150	X		9	X	X	X	X	X
WS-007 (0.5-1.0) 090913	9-9-13	1205	X		9	X	X	X	X	X
WS-001 (0.5-1.0) 090913	9-9-13	1215	X		9	X	X	X	X	X
WS-EB-56-090913	9-9-13	1245	X		7	X	X	X	X	
WS-TB-145-090913	9-9-13	1255	X		2	X				
WS-006 (0.5-1.0) 090913 MS/MSD	9-9-13	0950	X		13	X	X	X	X	X

(5) Analyses Requested — Preservation Code: H | | N | | H

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

(6) Remarks

(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 _____

	Date	Time	Received by	Date	Time
Relinquished by: Ryan Lewis	9-9-13	1430			
Relinquished by					
Relinquished by					
Relinquished by Commercial Carrier: UPS X FedEx ____ Other ____			Received by: Brandy Rum	9.10.13	935

(9)

Temperature Upon Receipt 1.7-2.1 °C

Custody Seals Intact? (Yes) No

Rachel L. Kreamer A# 14739, Gr# 1417563, Samples 7191406-25

From: Mott, Lyndi [Lyndi.Mott@arcadis-us.com]
Sent: Wednesday, September 11, 2013 9:52 AM
To: Rachel L. Kreamer
Cc: Kathy Klinefelter
Subject: RE: One surface water cooler temp from 9/10

Yes, please proceed with the analyses.

Thank you,

Lyndi Mott | Project Chemistry/Data Quality Specialist | lyndi.mott@arcadis-us.com ARCADIS U.S., Inc. | 2929 Briarpark Drive | Suite 300 | Houston, TX 77042 T. 713.953.4829 l T. 832.534.8140 l M. 315.569.9448 www.arcadis-us.com ARCADIS, Imagine the result Please consider the environment before printing this email.

-----Original Message-----
From: Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]
Sent: Wednesday, September 11, 2013 8:46 AM
To: Mott, Lyndi
Cc: Kathy Klinefelter
Subject: One surfact water cooler temp from 9/10

Lyndi,

While auditing the surface water paperwork from yesterday's samples I noticed that one of the cooler temperatures was 7.1. The unpacker included notes on the doc log, which is attached. Surface temps of bottles from the four corners and the center of the cooler were taken and these were all well below 6C. Should we go ahead with the analyses?

Thanks
Rachel

-----Original Message-----
From: 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]
Sent: Wednesday, September 11, 2013 9:40 AM
To: Rachel L. Kreamer
Subject:

This E-mail was sent from "RNP367EC2" (MP 4001/LD140).

Scan Date: 09.11.2013 09:39:47 (-0400)
Queries to: 39Scanner@lancasterlabs.com

NOTICE: This e-mail and any files transmitted with it are the property of ARCADIS U.S., Inc. and its affiliates. All rights, including without limitation copyright, are reserved. The proprietary information contained in this e-mail message, and any files transmitted with it, is intended for the use of the recipient(s) named above. If the reader of this e-mail is not the intended recipient, you are hereby notified that you have received this e-mail in error and that any review, distribution or copying of this e-mail or any files transmitted with it is strictly prohibited. If you have received this e-mail in error, please notify the sender immediately and delete the original message and any files transmitted. The unauthorized use of this e-mail or any files transmitted with it is prohibited and disclaimed by ARCADIS U.S., Inc. and its affiliates. Nothing herein is intended to constitute the offering or performance of services where otherwise restricted by law.

eurofins | Lancaster Laboratories

Environmental Sample Administration 1417563
Receipt Documentation Log

Client/Project: Exxon Mobil

Date of Receipt: 9-10-13

Time of Receipt: 935

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	ST 8013596 Comments
1	DT146	1.7	TB	WI	Y	B	
2	↓	2.4	↓	↓	↓	↓	
3	↓	3.0	↓	↓	↓	↓	
4	↓	3.8	↓	↓	↓	B&L	
5	↓	7.1	↓	↓	↓	B&L	1.0 1.0 0.3 1.0 1.1
6	↓	4.8	↓	↓	↓	B&L	

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

Paperwork Discrepancy/Unpacking Problems:

Cooler #5 cooler had a lot of water very little Ice in bag on side of cooler away from TB, water was cold, TB was on top of card Board Divider

Unpacker Signature/Emp#: Brunely Bauer 2299 **Date/Time:** 9-10-13 11:14

Issued by Dept. 6042 Management

eurofins | Lancaster Laboratories Environmental

Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.