ANALYTICAL RESULTS

Prepared by:

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Lancaster, PA 17601

Prepared for:

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

September 03, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 08/26/2013
Group Number: 1414243
SDG: PEL03
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)082413 Grab Surface Water	7174829
WS-014(5.5-6.0)082413 Grab Surface Water	7174830
WS-012(1.5-2.0)082413 Grab Surface Water	7174831
WS-012(5.0-5.5)082413 Grab Surface Water	7174832
WS-010(1.5-2.0)082413 Grab Surface Water	7174833
WS-010(3.5-4.0)082413 Grab Surface Water	7174834
WS-006(0.5-1.0)082413 Grab Surface Water	7174835
WS-006(0.5-1.0)082413 MS Grab Surface Water	7174836
WS-006(0.5-1.0)082413 MSD Grab Surface Water	7174837
WS-006(0.5-1.0)082413 DUP Grab Surface Water	7174838
WS-005(Surface)082413 Grab Surface Water	7174839
WS-002(Surface)082413 Grab Surface Water	7174840
WS-018(Surface)082413 Grab Surface Water	7174841
WS-011(1.5-2.0)082413 Grab Surface Water	7174842
WS-011(5.0-5.5)082413 Grab Surface Water	7174843
WS-003(Surface)082413 Grab Surface Water	7174844
WS-007(0.5-1.0)082413 Grab Surface Water	7174845
WS-001(0.5-1.0)082413 Grab Surface Water	7174846
WS-EB-040-082413 Grab Water	7174847
WS-014(1.5-2.0)082513 Grab Surface Water	7174848
WS-014(5.5-6.0)082513 Grab Surface Water	7174849
WS-012(1.5-2.0)082513 Grab Surface Water	7174850
WS-012(5.0-5.5)082513 Grab Surface Water	7174851
WS-010(1.5-2.0)082513 Grab Surface Water	7174852
WS-010(3.5-4.0)082513 Grab Surface Water	7174853
WS-006(0.5-1.0)082513 Grab Surface Water	7174854

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
ELECTRONIC COPY TO	ExxonMobil	Attn: Carl Wideman

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1414243

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 #: I132391AA (Sample number(s): 7174852-7174854 UNSPK: P174023)

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

SW-846 8270C SIM, GC/MS Semivolatiles

Batch #: 13238WAF026 (Sample number(s): 7174829-7174837, 7174839-7174851 UNSPK: 7174835)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Acenaphthylene

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) 7174829, 7174830, 7174831, 7174832, 7174833, 7174834, 7174835, 7174836, 7174837, 7174840, 7174841, 7174842, 7174843, 7174844, 7174846, 7174848, 7174849, 7174850, 7174851, MS, MSD

Batch #: 13239WAB026 (Sample number(s): 7174852-7174854)

The relative percent difference(s) for the following analyte(s) in the LCS/LCSD were outside acceptance windows: Dibenz(a,h)anthracene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7174852, 7174853, 7174854

Sample #s: 7174829, 7174830, 7174831, 7174832, 7174833, 7174834, 7174835, 7174840, 7174841, 7174842, 7174843, 7174844, 7174846, 7174848, 7174849, 7174850, 7174851, 7174852, 7174853, 7174854

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

SW-846 6010B, Metals

Batch #: 132381848001 (Sample number(s): 7174829-7174851 UNSPK: 7174835 BKG: 7174835)

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

Batch #: 132381848002 (Sample number(s): 7174852-7174854 UNSPK: P174862 BKG: P174862)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Arsenic, Vanadium

EPA 1664A, Wet Chemistry

Batch #: 13242807901A (Sample number(s): 7174829-7174846, 7174848-7174852 UNSPK: 7174835 BKG: 7174835)

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

Batch #: 13245807901A (Sample number(s): 7174853-7174854 UNSPK: 7174853)

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

Sample Description: WS-014(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174829
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 08:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1415- SDG#: PEL03-01

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174829
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 08:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1415- SDG#: PEL03-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
	The 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	25.7	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0069 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0193	0.00033	0.0050	1

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

Sample Description: WS-014(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174829
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 08:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1415- SDG#: PEL03-01

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.79	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.73	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.8 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H132382AA	08/26/2013 23:28	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/26/2013 23:28	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 18:51	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 13:56	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174829
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 08:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1415- SDG#: PEL03-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-014(5.5-6.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174830
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1455 SDG#: PEL03-02

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174830
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1455 SDG#: PEL03-02

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	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	0.1	J	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.051	1
08357	Anthracene	120-12-7	N.D.		0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.051	1
08357	Chrysene	218-01-9	N.D.		0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.		0.010	0.051	1
08357	Fluorene	86-73-7	N.D.		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.		0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.031	0.051	1
08357	Pyrene	129-00-0	N.D.		0.010	0.051	1
	The 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	26.3		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	0.0247		0.00033	0.0050	1

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

Sample Description: WS-014(5.5-6.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174830
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1455 SDG#: PEL03-02

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.95	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.78	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	H132382AA	08/26/2013 23:49	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/26/2013 23:49	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 19:20	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:00	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174830
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1455 SDG#: PEL03-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-012(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174831
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-1- SDG#: PEL03-03

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174831
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-1- SDG#: PEL03-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	25.8	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	0.0235	0.00033	0.0050	1

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

Sample Description: WS-012(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174831
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-1- SDG#: PEL03-03

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.83	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.73	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	H132382AA	08/27/2013 00:10	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 00:10	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 19:50	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:12	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174831
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-1- SDG#: PEL03-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-012(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174832
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-5- SDG#: PEL03-04

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174832
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-5- SDG#: PEL03-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	26.5	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0097 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-012(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174832
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-5- SDG#: PEL03-04

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.03	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.77	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	H132382AA	08/27/2013 00:31	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 00:31	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 20:19	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:16	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174832
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

12-5- SDG#: PEL03-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-010(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174833
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-1- SDG#: PEL03-05

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174833
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-1- SDG#: PEL03-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	25.9	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	0.0400	0.00033	0.0050	1

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

Sample Description: WS-010(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174833
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-1- SDG#: PEL03-05

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.86	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.75	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	H132382AA	08/27/2013 00:51	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 00:51	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 20:49	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:20	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174833
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-1- SDG#: PEL03-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-010(3.5-4.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174834
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-3- SDG#: PEL03-06

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	3.0 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-010(3.5-4.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174834
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-3- SDG#: PEL03-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	26.2	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0093 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0772	0.00033	0.0050	1

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

Sample Description: WS-010(3.5-4.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174834
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-3- SDG#: PEL03-06

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.92	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.78	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	H132382AA	08/27/2013 01:12	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 01:12	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 21:18	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:24	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174834
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 09:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

10-3- SDG#: PEL03-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174835
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07BKG

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174835
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07BKG

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
	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	26.4	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	0.0279	0.00033	0.0050	1

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

Sample Description: WS-006(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174835
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07BKG

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.96	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.80	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	H132382AA	08/26/2013 22:05	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/26/2013 22:05	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 17:22	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 13:31	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174835
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07BKG

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)082413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174836
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MS

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	43	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.3	0.1	0.5	1
02898	Benzene	71-43-2	5.5	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.3	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.4	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.8	0.1	0.5	1
02898	Bromoform	75-25-2	5.0	0.1	0.5	1
02898	Bromomethane	74-83-9	5.1	0.1	0.5	1
02898	2-Butanone	78-93-3	38	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.6	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.4	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.5	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.4	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.5	0.1	0.5	1
02898	Chloroethane	75-00-3	5.3	0.1	0.5	1
02898	Chloroform	67-66-3	5.9	0.1	0.5	1
02898	Chloromethane	74-87-3	5.3	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	4.7	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.4	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.3	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.2	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.3	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.4	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.4	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.9	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.8	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	6.0	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	5.4	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	5.6	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.6	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	6.2	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	6.1	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.2	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.4	0.1	0.5	1
02898	Ethyl ether	60-29-7	5.3	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.4	0.1	0.5	1
02898	Freon 113	76-13-1	5.9	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	4.9	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	5.4	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	27	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.4	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)082413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174836
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MS

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	5.5	0.1	0.5	1
02898	Styrene	100-42-5	5.5	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.5	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	5.6	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	23	2.0	5.0	1
02898	Toluene	108-88-3	5.5	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.0	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	6.2	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.3	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.8	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.7	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	4.9	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.5	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.5	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	0.92	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.3	0.010	0.051	1
08357	Anthracene	120-12-7	0.24	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.70	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.30	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.91	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.74	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.88	0.010	0.051	1
08357	Chrysene	218-01-9	0.94	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.87	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.83	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.3	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.2	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.031	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.051	1
08357	Pyrene	129-00-0	0.72	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	44.7	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	2.05	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0510	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.97	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)082413 MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174836
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MS

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	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.153	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.80	0.0167	0.100	1
07061	Nickel	7440-02-0	0.519	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.150	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0451	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	0.0010	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	28.4	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	H132382AA	08/26/2013 22:26	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/26/2013 22:26	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 17:52	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 13:44	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)082413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174837
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MSD

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	43	3.0	5.0	1
02898	Allyl Chloride	107-05-1	5.3	0.1	0.5	1
02898	Benzene	71-43-2	5.4	0.1	0.5	1
02898	Bromobenzene	108-86-1	5.1	0.1	0.5	1
02898	Bromochloromethane	74-97-5	5.3	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	5.5	0.1	0.5	1
02898	Bromoform	75-25-2	5.1	0.1	0.5	1
02898	Bromomethane	74-83-9	4.9	0.1	0.5	1
02898	2-Butanone	78-93-3	39	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.3	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.3	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.2	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.1	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.3	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	5.1	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.2	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.4	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.4	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	5.3	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	5.2	0.1	0.5	1
02898	Dibromomethane	74-95-3	5.0	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.2	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.2	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.2	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	4.6	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.6	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.8	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	5.4	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.7	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.4	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	5.1	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	6.0	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	5.9	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	5.1	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	5.2	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.9	0.1	0.5	1
02898	Ethylbenzene	100-41-4	5.3	0.1	0.5	1
02898	Freon 113	76-13-1	5.6	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	4.8	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	5.3	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.2	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	5.3	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	27	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.2	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)082413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174837
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MSD

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	5.5	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	5.5	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	5.5	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	24	2.0	5.0	1
02898	Toluene	108-88-3	5.4	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	3.9	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.3	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	5.1	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.5	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.6	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	5.0	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	5.3	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.3	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	5.2	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	16	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.88	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.2	0.010	0.051	1
08357	Anthracene	120-12-7	0.18	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.62	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.28	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.85	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.68	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.82	0.010	0.051	1
08357	Chrysene	218-01-9	0.89	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.79	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.75	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.2	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.2	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	0.64	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	43.7	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.04	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0505	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.76	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)082413 MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174837
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07MSD

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**	
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.152	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.71	0.0167	0.100	1
07061	Nickel	7440-02-0	0.517	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.147	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0448	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.514	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.0010	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	28.9	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	H132382AA	08/26/2013 22:47	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/26/2013 22:47	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 18:21	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 13:48	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)082413 DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174838
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:05 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

605-- SDG#: PEL03-07DUP

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	26.8	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	0.0279	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.00	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.86	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 13:40	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 07:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-005(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174839
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-S-- SDG#: PEL03-08

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	3.1 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-005(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174839
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-S-- SDG#: PEL03-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
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	0.0083 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0619	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.57	0.0334	0.200	1

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

Sample Description: WS-005(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174839
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 10:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-S-- SDG#: PEL03-08

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**	
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	2.88	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0021 J	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H132382AA	08/27/2013 01:33	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 01:33	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 21:48	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:28	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-002(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174840
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

2-S-- SDG#: PEL03-09

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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174840
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

2-S-- SDG#: PEL03-09

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	0.1	J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.		0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.		0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.		0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.		0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.		0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.		0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.		0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.		0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.		0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**		**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.		0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.052	1
08357	Anthracene	120-12-7	N.D.		0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.052	1
08357	Chrysene	218-01-9	N.D.		0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.		0.010	0.052	1
08357	Fluorene	86-73-7	N.D.		0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.052	1
08357	Naphthalene	91-20-3	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	30.0		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0811		0.00033	0.0050	1

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

Sample Description: WS-002(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174840
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

2-S-- SDG#: PEL03-09

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	7.04	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.02	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	H132382AA	08/27/2013 01:54	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 01:54	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 22:17	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:33	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174840
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:20 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

2-S-- SDG#: PEL03-09

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-018(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174841
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

18-S- SDG#: PEL03-10

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-018(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174841
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

18-S- SDG#: PEL03-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	26.3	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	0.0451	0.00033	0.0050	1

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

Sample Description: WS-018(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174841
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

18-S- SDG#: PEL03-10

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	5.86	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.84	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	H132382AA	08/27/2013 02:15	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 02:15	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 22:47	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:37	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174841
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

18-S- SDG#: PEL03-10

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-011(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174842
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

11-1- SDG#: PEL03-11

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(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174842
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

11-1- SDG#: PEL03-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	26.3	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	0.0239	0.00033	0.0050	1

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

Sample Description: WS-011(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174842
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

11-1- SDG#: PEL03-11

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	5.92	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.80	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	H132382AA	08/27/2013 02:36	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 02:36	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 23:16	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:41	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174842
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

11-1- SDG#: PEL03-11

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-011(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174843
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

50-11 SDG#: PEL03-12

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-011(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174843
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

50-11 SDG#: PEL03-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	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	28.0	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0091 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0292	0.00033	0.0050	1

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

Sample Description: WS-011(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174843
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

50-11 SDG#: PEL03-12

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**	
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.30	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.98	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	H132382AA	08/27/2013 02:57	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 02:57	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/28/2013 23:46	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:45	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174843
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 11:50 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

50-11 SDG#: PEL03-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-003(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174844
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-3S-- SDG#: PEL03-13

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	3.2 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-003(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174844
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-3S-- SDG#: PEL03-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	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	31.2	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	0.0280	0.00033	0.0050	1

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

Sample Description: WS-003(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174844
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-3S-- SDG#: PEL03-13

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	7.83	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.83	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	H132382AA	08/27/2013 03:17	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 03:17	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 00:15	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 14:49	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174844
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 12:55 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-3S-- SDG#: PEL03-13

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-007(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174845
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:15 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-7-0- SDG#: PEL03-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Acetone	67-64-1	3.4 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-007(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174845
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:15 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-7-0- SDG#: PEL03-14

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.		0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.051	1
08357	Anthracene	120-12-7	0.013	J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.012	J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.011	J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.030	J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.011	J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.017	J	0.010	0.051	1
08357	Chrysene	218-01-9	0.024	J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.051	1
08357	Fluoranthene	206-44-0	0.039	J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.014	J	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.		0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.030	0.051	1
08357	Pyrene	129-00-0	0.036	J	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**		**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	14.7		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0087	J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0214		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	3.45		0.0334	0.200	1

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

Sample Description: WS-007(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174845
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:15 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-7-0- SDG#: PEL03-14

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	1.47	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.8 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H132382AA	08/27/2013 03:38	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 03:38	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 00:45	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:01	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-001(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174846
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1-0- SDG#: PEL03-15

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	3.1 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)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174846
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1-0- SDG#: PEL03-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	27.5	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	0.0471	0.00033	0.0050	1

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

Sample Description: WS-001(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174846
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1-0- SDG#: PEL03-15

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	6.20	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0019 J	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0056 J	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.91	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0036 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0030 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.	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	H132382AA	08/27/2013 03:59	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 03:59	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 01:15	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:05	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)082413 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174846
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 13:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-1-0- SDG#: PEL03-15

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-EB-040-082413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174847
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 14:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-EB40 SDG#: PEL03-16EB

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

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

Sample Description: WS-EB-040-082413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174847
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 14:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-EB40 SDG#: PEL03-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.11	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	0.78	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	0.00082 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	0.232	0.0334	0.200	1

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

Sample Description: WS-EB-040-082413 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174847
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/24/2013 14:40 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-EB40 SDG#: PEL03-16EB

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	0.0494 J	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H132382AA	08/27/2013 05:43	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 05:43	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 01:44	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:09	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174848
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-1- SDG#: PEL03-17

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174848
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-1- SDG#: PEL03-17

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.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	26.5	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0075 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0170	0.00033	0.0050	1

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

Sample Description: WS-014(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174848
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-1- SDG#: PEL03-17

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	5.99	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.79	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	H132382AA	08/27/2013 04:20	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 04:20	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 02:13	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:13	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174848
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:30 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-1- SDG#: PEL03-17

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-014(5.5-6.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174849
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-5- SDG#: PEL03-18

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174849
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-5- SDG#: PEL03-18

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	0.051	1
08357	Acenaphthylene	208-96-8	N.D.		0.010	0.051	1
08357	Anthracene	120-12-7	N.D.		0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.		0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.		0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.		0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.		0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.		0.010	0.051	1
08357	Chrysene	218-01-9	N.D.		0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.		0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.		0.010	0.051	1
08357	Fluorene	86-73-7	N.D.		0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.		0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.		0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.		0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.		0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.		0.030	0.051	1
08357	Pyrene	129-00-0	N.D.		0.010	0.051	1
	The 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	26.4		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	0.0180		0.00033	0.0050	1

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

Sample Description: WS-014(5.5-6.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174849
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-5- SDG#: PEL03-18

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	5.96	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.79	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	H132382AA	08/27/2013 04:40	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 04:40	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 02:43	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:17	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174849
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 08:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

14-5- SDG#: PEL03-18

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-012(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174850
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:00 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-12-1 SDG#: PEL03-19

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174850
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:00 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-12-1 SDG#: PEL03-19

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	26.5	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	0.0196	0.00033	0.0050	1

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

Sample Description: WS-012(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174850
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:00 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-12-1 SDG#: PEL03-19

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	6.02	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.78	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.	1.9 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	H132382AA	08/27/2013 05:01	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 05:01	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 13:42	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:21	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174850
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:00 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

-12-1 SDG#: PEL03-19

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-012(5.0-5.5)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174851
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:10 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-12- SDG#: PEL03-20

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174851
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:10 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-12- SDG#: PEL03-20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	26.3	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	0.0202	0.00033	0.0050	1

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

Sample Description: WS-012(5.0-5.5)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174851
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:10 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-12- SDG#: PEL03-20

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	5.96	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.76	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	H132382AA	08/27/2013 05:22	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	H132382AA	08/27/2013 05:22	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13238WAF026	08/29/2013 14:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13238WAF026	08/27/2013 09:30	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132416256001	08/29/2013 04:51	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
01750	Calcium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
01757	Magnesium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132381848001	08/28/2013 15:25	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132385713005	08/28/2013 08:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848001	08/27/2013 11:38	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713005	08/27/2013 15:00	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174851
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:10 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

5-12- SDG#: PEL03-20

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-010(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174852
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1-10- SDG#: PEL03-21

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174852
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1-10- SDG#: PEL03-21

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.012 J	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.020 J	0.010	0.051	1
08357	Naphthalene	91-20-3	0.063	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

The 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	26.5	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	0.0242	0.00033	0.0050	1

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

Sample Description: WS-010(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174852
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1-10- SDG#: PEL03-21

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	6.03	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.78	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	I132391AA	08/27/2013 14:19	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132391AA	08/27/2013 14:19	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13239WAB026	08/29/2013 06:48	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13239WAB026	08/27/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132406256001	08/28/2013 11:54	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07046	Barium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
01750	Calcium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07055	Lead	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07066	Silver	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132381848002	08/27/2013 20:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	132385713006	08/28/2013 08:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848002	08/27/2013 11:48	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713006	08/27/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174852
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:25 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

1-10- SDG#: PEL03-21

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	13242807901A	08/30/2013 08:51	Yolunder Y Bunch	1

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

Sample Description: WS-010(3.5-4.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174853
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:35 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

3-10- SDG#: PEL03-22

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174853
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:35 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

3-10- SDG#: PEL03-22

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
	The 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	26.9	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0080 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0276	0.00033	0.0050	1

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

Sample Description: WS-010(3.5-4.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174853
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:35 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

3-10- SDG#: PEL03-22

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	6.12	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.82	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	I132391AA	08/27/2013 14:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132391AA	08/27/2013 14:40	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13239WAB026	08/29/2013 07:18	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13239WAB026	08/27/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132406256001	08/28/2013 11:54	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07046	Barium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
01750	Calcium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07051	Chromium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07055	Lead	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07061	Nickel	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07036	Selenium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07066	Silver	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132381848002	08/27/2013 21:00	John P Hook	1
00259	Mercury	SW-846 7470A	1	132385713006	08/28/2013 08:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848002	08/27/2013 11:48	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713006	08/27/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174853
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:35 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

3-10- SDG#: PEL03-22

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	13245807901A	09/02/2013 05:30	Michelle L Lalli	1

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

Sample Description: WS-006(0.5-1.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174854
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

05-6- SDG#: PEL03-23*

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)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174854
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

05-6- SDG#: PEL03-23*

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	27.3	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0070 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0305	0.00033	0.0050	1

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

Sample Description: WS-006(0.5-1.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174854
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

05-6- SDG#: PEL03-23*

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	6.20	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.87	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	I132391AA	08/27/2013 15:01	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132391AA	08/27/2013 15:01	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13239WAB026	08/29/2013 07:47	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13239WAB026	08/27/2013 19:30	Nicholas W Shroyer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132406256001	08/28/2013 11:54	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07046	Barium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
01750	Calcium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07051	Chromium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07055	Lead	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07061	Nickel	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07036	Selenium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07066	Silver	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132381848002	08/27/2013 21:04	John P Hook	1
00259	Mercury	SW-846 7470A	1	132385713006	08/28/2013 08:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132381848002	08/27/2013 11:48	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132385713006	08/27/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082513 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7174854
LL Group # 1414243
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/25/2013 09:45 by TM

Submitted: 08/26/2013 12:30
Reported: 09/03/2013 13:01

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

05-6- SDG#: PEL03-23*

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	13245807901A	09/02/2013 05:30	Michelle L Lalli	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1414243
Reported: 09/03/13 at 01:01 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: H132382AA	Sample number(s): 7174829-7174837,7174839-7174851								
Acetone	N.D.	3.0	5.0	ug/l	109		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	100		61-130		
Benzene	N.D.	0.1	0.5	ug/l	106		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	112		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	113		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	103		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	96		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	104		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	102		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	101		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	119		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	101		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	116		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	98		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	102		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	107		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	90		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	110		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	110		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	107		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	89		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	111		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	121		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	108		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	111		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	103		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	110		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	107		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	113		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	111		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	102		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	107		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	112		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	103		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	106		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: 1414243
Reported: 09/03/13 at 01:01 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	102		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	100		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	109		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	115		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	109		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Styrene	N.D.	0.1	0.5	ug/l	109		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	110		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	107		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	95		65-131		
Toluene	N.D.	0.1	0.5	ug/l	106		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	83		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	87		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	116		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	110		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	109		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	105		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	110		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	97		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	106		80-120		
Batch number: I132391AA	Sample number(s): 7174852-7174854								
Acetone	N.D.	3.0	5.0	ug/l	104		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	83		61-130		
Benzene	N.D.	0.1	0.5	ug/l	96		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	105		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	99		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	101		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	85		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	113		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	98		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	104		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	81		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	101		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	75		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	124		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	101		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	104		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	101		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	102		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	81		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	95		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	102		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	99		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: 1414243
Reported: 09/03/13 at 01:01 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	102		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	90		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	99		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	97		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	97		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	100		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	96		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	95		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	86		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	99		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	98		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	102		73-120		
Isopropylbenzene	N.D.	0.1	0.5	ug/l	102		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	94		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	90		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	99		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Styrene	N.D.	0.1	0.5	ug/l	107		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	103		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	92		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	106		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	117		65-131		
Toluene	N.D.	0.1	0.5	ug/l	97		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	98		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	100		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	101		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	95		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	98		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	81		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	102		80-120		
Batch number: 13238WAF026	Sample number(s): 7174829-7174837,7174839-7174851								
Acenaphthene	N.D.	0.010	0.050	ug/l	111		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	124*		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	119		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	102		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	104		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	112		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	114		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	117		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	106		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	113		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	117		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	110		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	116		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	120		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	118		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	113		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	109		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	103		71-130		

*- Outside of specification
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(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: 1414243
Reported: 09/03/13 at 01:01 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13239WAB026	Sample number(s): 7174852-7174854								
Acenaphthene	N.D.	0.010	0.050	ug/l	102	104	77-118	1	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	113	114	80-123	1	30
Anthracene	N.D.	0.010	0.050	ug/l	104	107	78-123	2	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	86	91	73-127	5	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	84	96	72-120	14	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	91	105	79-136	14	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	72	96	64-130	28	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	90	109	73-131	19	30
Chrysene	N.D.	0.010	0.050	ug/l	92	100	76-125	9	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	59	89	58-131	40*	30
Fluoranthene	N.D.	0.010	0.050	ug/l	105	109	79-124	4	30
Fluorene	N.D.	0.010	0.050	ug/l	100	102	74-115	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	69	93	62-130	29	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	110	111	80-126	1	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	108	109	81-124	0	30
Naphthalene	N.D.	0.030	0.050	ug/l	106	106	75-120	0	30
Phenanthrene	N.D.	0.030	0.050	ug/l	102	101	75-120	0	30
Pyrene	N.D.	0.010	0.050	ug/l	97	98	71-130	1	30
Batch number: 132381848001	Sample number(s): 7174829-7174851								
Arsenic	N.D.	0.0068	0.0200	mg/l	101		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	102		90-112		
Calcium	0.0567 J	0.0334	0.200	mg/l	100		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	100		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	103		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	100		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	98		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	88		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	102		90-110		
Batch number: 132381848002	Sample number(s): 7174852-7174854								
Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	99		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	100		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	98		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	97		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	100		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	98		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	102		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	100		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	88		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	98		90-110		
Batch number: 132385713005	Sample number(s): 7174829-7174851								
Mercury	N.D.	0.00006 0	0.00020	mg/l	99		80-120		
Batch number: 132385713006	Sample number(s): 7174852-7174854								
Mercury	N.D.	0.00006 0	0.00020	mg/l	102		80-120		
Batch number: 13242807901A	Sample number(s): 7174829-7174846,7174848-7174852								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	94	95	78-114	1	16

*- Outside of specification
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(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: 1414243
Reported: 09/03/13 at 01:01 PM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 13245807901A	Sample number(s): 7174853-7174854								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	100	98	78-114	2	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: H132382AA	Sample number(s): 7174829-7174837,7174839-7174851 UNSPK: 7174835								
Acetone	116	115	57-163	1	30				
Allyl Chloride	106	105	56-160	1	30				
Benzene	110	107	87-126	2	30				
Bromobenzene	105	102	80-123	3	30				
Bromochloromethane	107	107	82-125	1	30				
Bromodichloromethane	115	111	82-133	4	30				
Bromoform	101	101	60-138	0	30				
Bromomethane	101	98	66-130	3	30				
2-Butanone	101	105	56-160	5	30				
n-Butylbenzene	111	107	83-131	4	30				
sec-Butylbenzene	109	105	84-128	3	30				
tert-Butylbenzene	110	103	84-135	6	30				
Carbon Tetrachloride	129	123	81-148	5	30				
Chlorobenzene	110	107	78-133	3	30				
Chloroethane	105	101	70-139	4	30				
Chloroform	118	115	86-136	2	30				
Chloromethane	106	102	49-135	3	30				
2-Chlorotoluene	108	103	75-134	4	30				
4-Chlorotoluene	110	107	76-134	2	30				
1,2-Dibromo-3-chloropropane	94	88	43-143	7	30				
Dibromochloromethane	107	105	79-125	2	30				
1,2-Dibromoethane	106	104	84-127	1	30				
Dibromomethane	105	101	83-126	4	30				
1,2-Dichlorobenzene	107	103	83-117	3	30				
1,3-Dichlorobenzene	108	105	79-132	3	30				
1,4-Dichlorobenzene	107	105	79-120	2	30				
Dichlorodifluoromethane	98	92	28-136	6	30				
1,1-Dichloroethane	116	111	88-136	4	30				
1,2-Dichloroethane	120	117	82-135	3	30				
1,1-Dichloroethene	118	115	83-150	3	30				
cis-1,2-Dichloroethene	108	107	82-129	1	30				
trans-1,2-Dichloroethene	117	114	88-127	2	30				
Dichlorofluoromethane	112	107	81-161	4	30				
1,2-Dichloropropane	112	110	91-126	2	30				
1,3-Dichloropropane	105	102	80-127	3	30				
2,2-Dichloropropane	123	120	80-134	2	30				
1,1-Dichloropropene	122	117	86-139	4	30				
cis-1,3-Dichloropropene	104	102	74-132	1	30				
trans-1,3-Dichloropropene	107	104	71-128	3	30				
Ethyl ether	106	98	57-139	7	30				
Ethylbenzene	109	106	80-140	3	30				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1414243
Reported: 09/03/13 at 01:01 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
Freon 113	117	113	77-147	4	30				
Hexachlorobutadiene	99	96	65-128	3	30				
Isopropylbenzene	110	107	81-133	3	30				
p-Isopropyltoluene	106	104	84-124	3	30				
Methyl Tertiary Butyl Ether	107	106	82-132	1	30				
4-Methyl-2-Pentanone	109	107	69-149	2	30				
Methylene Chloride	107	105	77-135	3	30				
n-Propylbenzene	111	108	79-131	3	30				
Styrene	111	109	63-151	1	30				
1,1,1,2-Tetrachloroethane	110	111	87-126	0	30				
1,1,2,2-Tetrachloroethane	103	101	75-131	2	30				
Tetrachloroethene	112	110	75-129	2	30				
Tetrahydrofuran	91	94	56-154	4	30				
Toluene	110	109	83-127	1	30				
1,2,3-Trichlorobenzene	80	78	73-125	3	30				
1,2,4-Trichlorobenzene	88	85	77-120	3	30				
1,1,1-Trichloroethane	123	119	85-140	4	30				
1,1,2-Trichloroethane	106	102	85-129	4	30				
Trichloroethene	115	110	85-131	4	30				
Trichlorofluoromethane	114	111	73-139	3	30				
1,2,3-Trichloropropane	99	101	76-120	2	30				
1,2,4-Trimethylbenzene	109	105	87-126	4	30				
1,3,5-Trimethylbenzene	111	106	89-129	4	30				
Vinyl Chloride	107	104	62-135	3	30				
Xylene (Total)	110	108	81-137	2	30				
Batch number: I132391AA	Sample number(s): 7174852-7174854 UNSPK: P174023								
Acetone	129	131	57-163	2	30				
Allyl Chloride	82	90	56-160	9	30				
Benzene	93	103	87-126	10	30				
Bromobenzene	93	104	80-123	12	30				
Bromochloromethane	96	105	82-125	9	30				
Bromodichloromethane	97	107	82-133	10	30				
Bromoform	98	109	60-138	10	30				
Bromomethane	72	82	66-130	13	30				
2-Butanone	133	131	56-160	2	30				
n-Butylbenzene	92	102	83-131	11	30				
sec-Butylbenzene	96	108	84-128	12	30				
tert-Butylbenzene	99	110	84-135	11	30				
Carbon Tetrachloride	108	118	81-148	9	30				
Chlorobenzene	98	108	78-133	10	30				
Chloroethane	70	79	70-139	13	30				
Chloroform	97	106	86-136	9	30				
Chloromethane	61	71	49-135	14	30				
2-Chlorotoluene	92	104	75-134	12	30				
4-Chlorotoluene	93	105	76-134	12	30				
1,2-Dibromo-3-chloropropane	159*	141	43-143	12	30				
Dibromochloromethane	100	112	79-125	11	30				
1,2-Dibromoethane	93	105	84-127	12	30				
Dibromomethane	91	101	83-126	11	30				
1,2-Dichlorobenzene	93	104	83-117	11	30				
1,3-Dichlorobenzene	95	107	79-132	12	30				

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(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: 1414243
Reported: 09/03/13 at 01:01 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	94	106	79-120	12	30				
Dichlorodifluoromethane	59	63	28-136	7	30				
1,1-Dichloroethane	91	101	88-136	10	30				
1,2-Dichloroethane	91	100	82-135	9	30				
1,1-Dichloroethene	100	110	83-150	10	30				
cis-1,2-Dichloroethene	101	127	82-129	10	30				
trans-1,2-Dichloroethene	103	112	88-127	9	30				
Dichlorofluoromethane	82	91	81-161	10	30				
1,2-Dichloropropane	93	104	91-126	11	30				
1,3-Dichloropropane	89	100	80-127	11	30				
2,2-Dichloropropane	97	108	80-134	10	30				
1,1-Dichloropropene	101	112	86-139	11	30				
cis-1,3-Dichloropropene	98	110	74-132	11	30				
trans-1,3-Dichloropropene	91	103	71-128	12	30				
Ethyl ether	69	77	57-139	10	30				
Ethylbenzene	96	106	80-140	11	30				
Freon 113	102	112	77-147	8	30				
Hexachlorobutadiene	104	116	65-128	11	30				
Isopropylbenzene	101	112	81-133	10	30				
p-Isopropyltoluene	95	106	84-124	11	30				
Methyl Tertiary Butyl Ether	82	94	82-132	14	30				
4-Methyl-2-Pentanone	70	89	69-149	23	30				
Methylene Chloride	92	101	77-135	10	30				
n-Propylbenzene	92	103	79-131	12	30				
Styrene	102	113	63-151	10	30				
1,1,1,2-Tetrachloroethane	98	109	87-126	10	30				
1,1,2,2-Tetrachloroethane	80	89	75-131	11	30				
Tetrachloroethene	98 (2)	324 (2)	75-129	11	30				
Tetrahydrofuran	115	116	56-154	1	30				
Toluene	95	106	83-127	10	30				
1,2,3-Trichlorobenzene	94	102	73-125	8	30				
1,2,4-Trichlorobenzene	96	105	77-120	9	30				
1,1,1-Trichloroethane	101	112	85-140	10	30				
1,1,2-Trichloroethane	90	101	85-129	11	30				
Trichloroethene	18 (2)	191 (2)	85-131	10	30				
Trichlorofluoromethane	89	94	73-139	6	30				
1,2,3-Trichloropropane	83	94	76-120	13	30				
1,2,4-Trimethylbenzene	93	104	87-126	11	30				
1,3,5-Trimethylbenzene	94	106	89-129	12	30				
Vinyl Chloride	72	82	62-135	13	30				
Xylene (Total)	98	109	81-137	10	30				
Batch number: 13238WAF026	Sample number(s): 7174829-7174837,7174839-7174851 UNSPK: 7174835								
Acenaphthene	90	87	47-136	4	30				
Acenaphthylene	123	122	33-146	2	30				
Anthracene	23*	18*	69-119	27	30				
Benzo(a)anthracene	68	62	37-150	11	30				
Benzo(a)pyrene	29*	27*	64-123	7	30				
Benzo(b)fluoranthene	88	84	33-152	7	30				
Benzo(g,h,i)perylene	72	67	36-138	9	30				
Benzo(k)fluoranthene	85	81	31-142	7	30				
Chrysene	91	88	34-135	5	30				

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1414243
Reported: 09/03/13 at 01:01 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
Dibenz(a,h)anthracene	84	78	17-134	9	30				
Fluoranthene	107	104	39-147	5	30				
Fluorene	111	109	38-149	3	30				
Indeno(1,2,3-cd)pyrene	80	74	29-143	9	30				
1-Methylnaphthalene	122	121	49-152	2	30				
2-Methylnaphthalene	119	118	51-146	2	30				
Naphthalene	115	115	58-131	2	30				
Phenanthrene	110	108	48-140	3	30				
Pyrene	70	64	59-125	11	30				
Batch number: 132381848001	Sample number(s): 7174829-7174851 UNSPK: 7174835 BKG: 7174835								
Arsenic	106	104	81-123	3	20	N.D.	N.D.	0 (1)	20
Barium	101	101	78-118	1	20	0.0279	0.0279	0	20
Cadmium	102	101	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	100	95	81-118	2	20	5.96	6.00	1	20
Chromium	103	101	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	102	101	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	100	95	75-125	2	20	2.80	2.86	2	20
Nickel	104	103	86-115	1	20	N.D.	0.0017 J	200* (1)	20
Selenium	100	98	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	90	90	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	104	103	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132381848002	Sample number(s): 7174852-7174854 UNSPK: P174862 BKG: P174862								
Arsenic	96	97	81-123	1	20	0.0074 J	0.0102 J	33* (1)	20
Barium	100	102	78-118	2	20	0.0310	0.0309	0	20
Cadmium	100	101	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	98	98	81-118	0	20	3.96	3.91	1	20
Chromium	98	101	81-120	2	20	N.D.	N.D.	0 (1)	20
Lead	103	103	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	100	102	75-125	1	20	1.70	1.69	1	20
Nickel	102	104	86-115	1	20	0.0016 J	0.0016 J	2 (1)	20
Selenium	100	101	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	89	89	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	99	101	90-111	2	20	N.D.	0.0023 J	200* (1)	20
Batch number: 132385713005	Sample number(s): 7174829-7174851 UNSPK: 7174835 BKG: 7174835								
Mercury	102	101	80-120	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132385713006	Sample number(s): 7174852-7174854 UNSPK: P167124 BKG: P167124								
Mercury	104	102	80-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 13242807901A	Sample number(s): 7174829-7174846,7174848-7174852 UNSPK: 7174835 BKG: 7174835								
HEM (oil & grease)	66*	69*	78-114	2	29	N.D.	N.D.	0 (1)	18
Batch number: 13245807901A	Sample number(s): 7174853-7174854 UNSPK: 7174853								
HEM (oil & grease)	67*		78-114						

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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1414243
Reported: 09/03/13 at 01:01 PM

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge
Batch number: H132382AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7174829	110	104	101	99
7174830	111	101	102	99
7174831	111	107	101	99
7174832	111	106	102	99
7174833	111	102	102	98
7174834	111	107	102	99
7174835	110	105	102	101
7174836	109	102	104	104
7174837	107	102	105	105
7174839	110	107	101	99
7174840	112	102	101	98
7174841	112	103	101	98
7174842	110	104	102	99
7174843	110	104	101	98
7174844	112	106	101	97
7174845	112	103	101	97
7174846	112	102	102	97
7174847	111	104	100	99
7174848	111	104	101	99
7174849	111	108	101	98
7174850	112	106	101	99
7174851	113	103	101	99
Blank	113	109	101	98
LCS	110	107	104	104
MS	109	102	104	104
MSD	107	102	105	105
Limits:	77-114	74-113	77-110	78-110

Analysis Name: BTEX 25-ml purge
Batch number: I132391AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7174852	104	103	96	94
7174853	105	103	96	93
7174854	105	104	96	94
Blank	104	102	97	94
LCS	103	100	98	100
MS	103	101	98	99
MSD	101	97	98	97
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13238WAF026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7174829	88	49*	108

*- 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: 1414243
Reported: 09/03/13 at 01:01 PM

Surrogate Quality Control

7174830	92	59*	107
7174831	92	56*	109
7174832	88	48*	104
7174833	93	60*	111
7174834	88	59*	106
7174835	92	58*	108
7174836	91	51*	113
7174837	90	51*	113
7174839	87	66	103
7174840	87	59*	105
7174841	88	44*	106
7174842	91	57*	111
7174843	86	40*	106
7174844	92	53*	110
7174845	91	87	109
7174846	87	50*	106
7174847	93	87	109
7174848	87	53*	107
7174849	89	49*	102
7174850	90	54*	102
7174851	91	53*	105
Blank	84	104	108
LCS	97	103	111
MS	91	51*	113
MSD	90	51*	113
Limits:	44-137	62-141	51-136

Analysis Name: PAHs in waters by SIM
Batch number: 13239WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7174852	89	58*	103
7174853	86	51*	101
7174854	88	54*	104
Blank	87	88	104
LCS	89	81	103
LCSD	92	95	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

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Acct. # 14739 — For Eurofins Lancaster Laboratories Environmental use only — Group # 1414243 — Sample # 717982 9-54

Instructions on reverse side correspond with circled numbers.

Pg. 1 of 3

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: Tyler Milburn / Johnny Beasley

SCR#:

Preservation Codes

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

6 Remarks

Lab to Filter & preserve Diss. Metals upon receipt

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	4 Matrix: Soil	Water	Oil	Total # of Containers	5 Analyses Requested: Preservation Code: H	VOCs 8260B	PAH 8270 SIM	RCRA Metals + Ni, V (Ca, Mg hardness)	Diss. Metals	N	HEM Oil & Grease	H
WS-014(1.5-2.0)082413	8/24/13	855	✓			✓		9		✓	✓	✓	✓		✓	
WS-014(5.5-6.0)082413		905	✓			✓		9		✓	✓	✓	✓		✓	
WS-012(1.5-2.0)082413		920	✓			✓		9		✓	✓	✓	✓		✓	
WS-012(5.0-5.5)082413		925	✓			✓		9		✓	✓	✓	✓		✓	
WS-010(1.5-2.0)082413		940	✓			✓		9		✓	✓	✓	✓		✓	
WS-010(3.5-4.0)082413		950	✓			✓		9		✓	✓	✓	✓		✓	
WS-006(0.5-1.0)082413		1005	✓			✓		9		✓	✓	✓	✓		✓	
WS-006(0.5-1.0)082413 MS/MSD		1005	✓			✓		18		✓	✓	✓	✓		✓	MS/MSD
WS-005(surface)082413		1055	✓			✓		9		✓	✓	✓	✓		✓	
WS-002(surface)082413		1120	✓			✓		9		✓	✓	✓	✓		✓	
WS-018(surface)082413		1240	✓			✓		9		✓	✓	✓	✓		✓	
WS-011(1.5-2.0)082413	↓	1145	✓			✓		9		✓	✓	✓	✓		✓	

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]	8/25/13	1500	[signature]		9
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date (3) 8/26/13	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other Southwest			Received by [signature]	Date 8/26/13	Time 1230

Temperature Upon Receipt 0.4 - 4.5 °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 # 1414243 — Sample # 7174829-54

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility #/SID: MayFlower Pipeline Incident

Site Address: MayFlower, AR

ExxonMobil PM: Scott Bushnoe — Cost Center/AFE:

Consultant/Office: Arcadis

Consultant PM: Steve Barrick — Consultant Phone #: 919-302-6799

Sampler: Tyler Milburn / Johnny Beasley

SCR#:

Preservation Codes

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

6 Remarks

Lab to Filter & preserv Diss. Metals upon receipt

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	4 Matrix: Soil	Water	Oil	Sediment	Potable	NPDES	Ground	Surface	Air	Total # of Containers	5 Analyses Requested: VOCs 8260B (H)	PAH 8270 SIM (H)	RCRA Metals + Ni, V (Cr) nondrinking (N)	Diss. Metals (H)	HEM Oil & Grease (H)
WS-011 (5.0-5.5) 082413	8/24/13	1150	✓			✓								9	✓	✓	✓	✓	✓
WS-003 (Surface) 082413	8/24/13	1255	✓			✓								9	✓	✓	✓	✓	✓
WS-007 (0.5-1.0) 082413	8/24/13	1315	✓			✓								9	✓	✓	✓	✓	✓
WS-001 (0.5-1.0) 082413	8/24/13	1330	✓			✓								9	✓	✓	✓	✓	✓
WS-EB-040-082413	8/24/13	1440	✓			✓								7	✓	✓	✓	✓	
WS-014 (1.5-2.0) 082513	8/25/13	830	✓			✓								9	✓	✓	✓	✓	✓
WS-014 (5.5-6.0) 082513	↓	845	✓			✓								9	✓	✓	✓	✓	✓
WS-012 (1.5-2.0) 082513		900	✓			✓								9	✓	✓	✓	✓	✓
WS-012 (5.0-5.5) 082513		910	✓			✓								9	✓	✓	✓	✓	✓
WS-010 (1.5-2.0) 082513		925	✓			✓								9	✓	✓	✓	✓	✓
WS-010 (3.5-4.0) 082513		935	✓			✓								9	✓	✓	✓	✓	✓
WS-006 (0.5-1.0) 082513	↓	945	✓			✓								9	✓	✓	✓	✓	✓

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]	8/25/13	1500			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other Southwest			Received by [signature]	8/26/13	1230

Temperature Upon Receipt 0.4 °C — Custody Seals Intact? (Yes) No

Rachel L. Kreamer A#14739 Gr# 1414243 Sample 774829-54

From: Chandler, Jennifer [Jennifer.Chandler@arcadis-us.com]
Sent: Monday, August 26, 2013 5:18 PM
To: Kathy Klinefelter
Cc: Rachel L. Kreamer; Mott, Lyndi
Subject: RE: Mayflower Surface water sampling COCs and Southwest Airbill 082513

Kathy,

It appears that the two samples are the Parent and Duplicate, and these bottles were mislabeled. Please proceed to split the total and dissolved containers between the two sample IDs, to complete the bottle sets for metals, and proceed with analysis.

Thank you for your patience,

Jennifer Chandler | Scientist 2 | jennifer.chandler@arcadis-us.com
ARCADIS U.S., Inc. | 630 Plaza Drive, Suite 100 | Highlands Ranch, CO, 80129
T. 303.471.3549 | F. 720.344.3535
www.arcadis-us.com

From: Kathy Klinefelter [mailto:KKlinefelter@lancasterlabs.com]
Sent: Monday, August 26, 2013 11:31 AM
To: Chandler, Jennifer; Rachel L. Kreamer
Subject: FW: Mayflower Surface water sampling COCs and Southwest Airbill 082513

Hello Jennifer,

Please see attached COCs. The following discrepancy was noted at unpacking today.

For WS-006(0.5-1.0)082513 collected 8/25/13 at 0945, the lab received 2 HNO3 preserved bottles for total metals, but did not receive a bottle for dissolved metals.

For DUP-WS-76 collected 8/25/13, the lab received 2 unpreserved bottles for lab filtration for dissolved metals, but did not receive a bottle for total metals.

Is DUP-WS-76 the field duplicate of WS-006(0.5-1.0)082513? If so, we will use the extra bottles received to complete the bottle sets for metals for these locations.

Thanks,

Kathy Klinefelter
Principal Project Manager, Environmental Client Services

Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-556-7256
Fax: 717-656-6766

Website: www.LancasterLabsEnv.com

A# 14739. Gr.#1414243 Sample 7174829-54

From: Milburn, Tyler [mailto:Tyler.Milburn@arcadis-us.com]
Sent: Sunday, August 25, 2013 7:34 PM
To: Kathy Klinefelter; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie; Van Aller, Hans; Steve C. Davies
Subject: Mayflower Surface water sampling COCs and Southwest Airbill 082513

Attached are the COCs from yesterday and today's surface water sampling activities. Also attached is the southwest airbill from today's shipment. All samples collected yesterday and today will be on flight 4101/1659 scheduled to arrive in Baltimore at 11:00pm EST tonight.

Thanks,

Tyler Milburn, G.I.T. | Geologist 1 | tyler.milburn@arcadis-us.com
ARCADIS U.S., Inc. | 2464 Fortune Dr., Suite 170 | Lexington, KY 40509
T: 859.253.9036 | M: 859.559.5680 | F: 859.253.9136
www.arcadis-us.com

ARCADIS, Imagine the result
Please consider the environment before printing this email.

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G-1414243

Environmental Sample Administration Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 8/26/13

Time of Receipt: 1230

Source Code: 01

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	4.1	TB	WI	Y	B	
2	↓	0.8	↓	↓	↓	↓	
3		0.5					
4		2.8					
5		1.6					
6		1.6					

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

Paperwork Discrepancy/Unpacking Problems:

Grps. 1414243 1414252 WS-006(0.5-1.0)082513 @ 0945 had 2 HNO3 pres metals bottles

Grps. 1414245 1414259 Dup-WS-76 082513 has 2 unpres. metals bottles

Unpacker Signature/Emp#: 964 **Date/Time:** 8/26/13 1415

Issued by Dept. 6042 Management

2174.06

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G-1414243

Environmental Sample Administration Receipt Documentation Log

Client/Project: ExxonMobil

Date of Receipt: 8/26/13

Time of Receipt: 1230

Source Code: 01

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
7	DT121	1.6	TB	WI	Y	B	
8	↓	2.4	↓	↓	↓	↓	
9	↓	1.1	↓	↓	↓	↓	
10	↓	0.4	↓	↓	↓	↓	
11	↓	2.1	↓	↓	↓	↓	
12	↓	4.5	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: 964 **Date/Time:** 8/26/13 1415

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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