ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

October 21, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/14/2013
Group Number: 1426122
SDG: PEM15
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)101313 Grab Surface Water	7235554
WS-014(5.5-6.0)101313 Grab Surface Water	7235555
WS-012(1.5-2.0)101313 Grab Surface Water	7235556
WS-012(5.0-5.5)101313 Grab Surface Water	7235557
WS-010(1.5-2.0)101313 Grab Surface Water	7235558
WS-010(3.5-4.0)101313 Grab Surface Water	7235559
WS-006(0.5-1.0)101313 Grab Surface Water	7235560
WS-006(0.5-1.0)101313MS Grab Surface Water	7235561
WS-006(0.5-1.0)101313MSD Grab Surface Water	7235562
WS-006(0.5-1.0)101313DUP Grab Surface Water	7235563
WS-005(Surface)101313 Grab Surface Water	7235564
WS-011(1.5-2.0)101313 Grab Surface Water	7235565
WS-011(5.0-5.5)101313 Grab Surface Water	7235566
WS-002(Surface)101313 Grab Surface Water	7235567
WS-018(Surface)101313 Grab Surface Water	7235568
WS-003(Surface)101313 Grab Surface Water	7235569
WS-007(0.5-1.0)101313 Grab Surface Water	7235570
WS-001(0.5-1.0)101313 Grab Surface Water	7235571
WS-EB-90-101313 Grab Water	7235572
WS-TB-175-101313 Water	7235573

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

ELECTRONIC COPY TO	ARCADIS	Attn: Stephen Barrick
ELECTRONIC COPY TO	ARCADIS	Attn: Lyndi Mott

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1426122

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 8270C SIM, GC/MS Semivolatiles

Batch #: 13289WAB026 (Sample number(s): 7235554-7235562, 7235564-7235572 UNSPK: 7235560)

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) 7235554, 7235556, 7235557, 7235558, 7235567, 7235569

Sample #s: 7235554, 7235556, 7235557, 7235558, 7235567, 7235569

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

EPA 1664A, Wet Chemistry

Batch #: 13292807902A (Sample number(s): 7235554-7235571 UNSPK: 7235560 BKG: 7235560)

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

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

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

Sample Description: WS-014(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235554
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1501 SDG#: PEM15-01

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235554
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1501 SDG#: PEM15-01

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

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	23.2	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	0.0351	0.00033	0.0050	1

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

Sample Description: WS-014(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235554
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1501 SDG#: PEM15-01

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	5.15	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.51	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.4 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132872AA	10/15/2013 00:39	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 00:39	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 08:19	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:33	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235554
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1501 SDG#: PEM15-01

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-014(5.5-6.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235555
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1502 SDG#: PEM15-02

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235555
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1502 SDG#: PEM15-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.037 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	22.8	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0357	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.06	0.0334	0.200	1

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

Sample Description: WS-014(5.5-6.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235555
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1502 SDG#: PEM15-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.47	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.	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	I132872AA	10/15/2013 01:01	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 01:01	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 08:48	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:37	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-012(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235556
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1503 SDG#: PEM15-03

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235556
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1503 SDG#: PEM15-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.037 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The 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	23.1	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0320	0.00033	0.0050	1

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

Sample Description: WS-012(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235556
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1503 SDG#: PEM15-03

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	5.15	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.49	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0015 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	I132872AA	10/15/2013 01:22	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 01:22	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 09:16	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:50	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235556
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1503 SDG#: PEM15-03

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-012(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235557
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1504 SDG#: PEM15-04

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235557
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1504 SDG#: PEM15-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.045 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
	The 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	22.9	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	0.0389	0.00033	0.0050	1

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

Sample Description: WS-012(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235557
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1504 SDG#: PEM15-04

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	5.09	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.47	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0015 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	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	I132872AA	10/15/2013 01:43	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 01:43	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 09:45	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:54	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235557
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1504 SDG#: PEM15-04

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-010(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235558
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:50 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1505 SDG#: PEM15-05

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235558
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:50 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1505 SDG#: PEM15-05

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	0.070	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	23.5	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0328	0.00033	0.0050	1

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

Sample Description: WS-010(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235558
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:50 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1505 SDG#: PEM15-05

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	5.24	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.52	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	I132872AA	10/15/2013 02:04	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 02:04	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 10:14	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:58	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235558
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 08:50 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1505 SDG#: PEM15-05

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-010(3.5-4.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235559
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1506 SDG#: PEM15-06

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

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

Sample Description: WS-010(3.5-4.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235559
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1506 SDG#: PEM15-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.040 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	23.0	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	0.0322	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.14	0.0334	0.200	1

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

Sample Description: WS-010(3.5-4.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235559
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1506 SDG#: PEM15-06

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.47		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.	1.6	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	I132872AA	10/15/2013 02:25	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 02:25	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 10:42	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:02	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235560
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07BKG

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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235560
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07BKG

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	0.050	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
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	24.1	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0326	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.36	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235560
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.60	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	I132872AA	10/15/2013 02:46	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 02:46	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 05:27	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:08	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)101313MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235561
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MS

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	45	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.4	0.1	0.5	1
02898	Benzene	71-43-2	5.0	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.9	0.1	0.5	1
02898	Bromochloromethane	74-97-5	4.7	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.7	0.1	0.5	1
02898	Bromoform	75-25-2	4.5	0.1	0.5	1
02898	Bromomethane	74-83-9	4.3	0.1	0.5	1
02898	2-Butanone	78-93-3	41	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.0	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.1	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.1	0.1	0.5	1
02898	Chlorobenzene	108-90-7	4.9	0.1	0.5	1
02898	Chloroethane	75-00-3	4.4	0.1	0.5	1
02898	Chloroform	67-66-3	4.9	0.1	0.5	1
02898	Chloromethane	74-87-3	4.8	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.0	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.0	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	5.6	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	4.7	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.8	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.8	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.0	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.1	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.0	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.1	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.1	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.8	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.3	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	4.9	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.1	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.2	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.1	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.9	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	4.7	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	4.9	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.4	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.4	0.1	0.5	1
02898	Ethylbenzene	100-41-4	4.9	0.1	0.5	1
02898	Freon 113	76-13-1	5.1	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.1	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	4.9	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.0	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.3	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	22	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.1	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)101313MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235561
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MS

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	5.1	0.1	0.5	1
02898	Styrene	100-42-5	4.7	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	4.9	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	5.0	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	26	2.0	5.0	1
02898	Toluene	108-88-3	4.9	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.8	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.8	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	4.9	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.0	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.0	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.1	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	5.0	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.0	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.6	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	15	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.87	0.010	0.050	1
08357	Acenaphthylene	208-96-8	0.94	0.010	0.050	1
08357	Anthracene	120-12-7	0.39	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	0.76	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.37	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.90	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.66	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.82	0.010	0.050	1
08357	Chrysene	218-01-9	0.84	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	0.74	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.90	0.010	0.050	1
08357	Fluorene	86-73-7	0.95	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.72	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.98	0.010	0.050	1
08357	Naphthalene	91-20-3	0.97	0.030	0.050	1
08357	Phenanthrene	85-01-8	0.93	0.030	0.050	1
08357	Pyrene	129-00-0	0.79	0.010	0.050	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	43.2	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.08	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0521	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.59	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)101313MS Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235561
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MS

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	0.211	0.0016	0.0150	1
07055	Lead	7439-92-1	0.161	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.68	0.0167	0.100	1
07061	Nickel	7440-02-0	0.524	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.154	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0489	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.515	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.00093	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	2.1 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132872AA	10/15/2013 03:08	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 03:08	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 05:56	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:20	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)101313MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235562
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Acetone	67-64-1	39	3.0	5.0	1
02898	Allyl Chloride	107-05-1	4.4	0.1	0.5	1
02898	Benzene	71-43-2	5.0	0.1	0.5	1
02898	Bromobenzene	108-86-1	4.9	0.1	0.5	1
02898	Bromochloromethane	74-97-5	4.7	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	4.7	0.1	0.5	1
02898	Bromoform	75-25-2	4.6	0.1	0.5	1
02898	Bromomethane	74-83-9	4.4	0.1	0.5	1
02898	2-Butanone	78-93-3	35	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	5.0	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	5.1	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	5.1	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.0	0.1	0.5	1
02898	Chlorobenzene	108-90-7	4.9	0.1	0.5	1
02898	Chloroethane	75-00-3	4.5	0.1	0.5	1
02898	Chloroform	67-66-3	4.9	0.1	0.5	1
02898	Chloromethane	74-87-3	4.8	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	5.0	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	5.0	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	4.8	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	4.8	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	4.8	0.1	0.5	1
02898	Dibromomethane	74-95-3	4.8	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	5.0	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	5.1	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	5.0	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	5.1	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	5.0	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	4.7	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	5.4	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	4.9	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	5.1	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	5.2	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	5.1	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	4.9	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	4.7	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	4.9	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	4.7	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	4.4	0.1	0.5	1
02898	Ethyl ether	60-29-7	4.5	0.1	0.5	1
02898	Ethylbenzene	100-41-4	4.9	0.1	0.5	1
02898	Freon 113	76-13-1	5.0	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	5.1	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	4.9	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	5.0	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	4.4	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	22	1.0	5.0	1
02898	Methylene Chloride	75-09-2	5.1	0.2	0.5	1

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

Sample Description: WS-006(0.5-1.0)101313MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235562
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MSD

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	5.1	0.1	0.5	1
02898	Styrene	100-42-5	4.7	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	4.9	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	5.0	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	23	2.0	5.0	1
02898	Toluene	108-88-3	4.8	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	4.9	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	4.8	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	4.9	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	5.0	0.1	0.5	1
02898	Trichloroethene	79-01-6	5.0	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	5.1	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	5.0	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	5.0	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	4.7	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	14	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	0.90	0.010	0.051	1
08357	Acenaphthylene	208-96-8	0.94	0.010	0.051	1
08357	Anthracene	120-12-7	0.49	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.78	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.37	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.88	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.59	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.79	0.010	0.051	1
08357	Chrysene	218-01-9	0.82	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.64	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.92	0.010	0.051	1
08357	Fluorene	86-73-7	0.94	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.63	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.0	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.0	0.010	0.051	1
08357	Naphthalene	91-20-3	0.99	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.95	0.030	0.051	1
08357	Pyrene	129-00-0	0.84	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	41.3	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.154	0.0068	0.0200	1
07046	Barium	7440-39-3	2.04	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0514	0.00076	0.0050	1
01750	Calcium	7440-70-2	9.17	0.0334	0.200	1

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

Sample Description: WS-006(0.5-1.0)101313MSD Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235562
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07MSD

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	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.160	0.0047	0.0150	1
01757	Magnesium	7439-95-4	4.48	0.0167	0.100	1
07061	Nickel	7440-02-0	0.520	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.153	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0476	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.504	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.00092	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	16.2	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	I132872AA	10/15/2013 03:29	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 03:29	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 06:24	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:24	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-006(0.5-1.0)101313DUP Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235563
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1507 SDG#: PEM15-07DUP

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	24.1		0.033	0.20	1
	SW-846 6010B		**mg/l**		**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.		0.0068	0.0200	1
07046	Barium	7440-39-3	0.0324		0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.		0.00076	0.0050	1
01750	Calcium	7440-70-2	5.36		0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.60		0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.		0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.		0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.		0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.		0.0020	0.0050	1
	SW-846 7470A		**mg/l**		**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.		0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**		**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.4	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 05:16	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-005(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235564
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1508 SDG#: PEM15-08

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

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

Sample Description: WS-005(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235564
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1508 SDG#: PEM15-08

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.039 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	25.3	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	0.0364	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.80	0.0334	0.200	1

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

Sample Description: WS-005(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235564
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 09:30 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1508 SDG#: PEM15-08

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	2.63	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0020 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	I132872AA	10/15/2013 08:27	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 08:27	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 11:11	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:07	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-011(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235565
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1509 SDG#: PEM15-09

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

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

Sample Description: WS-011(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235565
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1509 SDG#: PEM15-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.046 J	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	25.6	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0388	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.66	0.0334	0.200	1

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

Sample Description: WS-011(1.5-2.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235565
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1509 SDG#: PEM15-09

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**	
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	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry	**EPA 1664A**		**mg/l**	**mg/l**	**mg/l**	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132872AA	10/15/2013 04:12	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 04:12	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 11:40	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:11	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-011(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235566
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1510 SDG#: PEM15-10

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

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

Sample Description: WS-011(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235566
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1510 SDG#: PEM15-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.047 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1
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	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0390	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.70	0.0334	0.200	1

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

Sample Description: WS-011(5.0-5.5)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235566
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1510 SDG#: PEM15-10

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**	
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	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	I132872AA	10/15/2013 04:33	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 04:33	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 12:08	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:15	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-002(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235567
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1511 SDG#: PEM15-11

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

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

Sample Description: WS-002(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235567
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1511 SDG#: PEM15-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.055	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	25.5	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	0.0373	0.00033	0.0050	1

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

Sample Description: WS-002(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235567
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1511 SDG#: PEM15-11

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	5.67	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	I132872AA	10/15/2013 04:54	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 04:54	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 12:37	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:19	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235567
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:20 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1511 SDG#: PEM15-11

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-018(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235568
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1512 SDG#: PEM15-12

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

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

Sample Description: WS-018(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235568
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1512 SDG#: PEM15-12

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.057	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
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	0.118	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

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

Sample Description: WS-018(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235568
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1512 SDG#: PEM15-12

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010B**		**mg/l**		**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.		0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.		0.0047	0.0150	1
01757	Magnesium	7439-95-4	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.	2.2	J	1.4	5.0	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132872AA	10/15/2013 05:15	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 05:15	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 13:06	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:23	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-003(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235569
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1513 SDG#: PEM15-13

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

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

Sample Description: WS-003(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235569
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1513 SDG#: PEM15-13

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	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.062	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	27.1	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0627	0.00033	0.0050	1

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

Sample Description: WS-003(Surface)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235569
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1513 SDG#: PEM15-13

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	6.05	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.92	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0022 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	I132872AA	10/15/2013 05:36	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 05:36	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 13:35	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:28	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 09:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: **WS-003(Surface)101313 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235569
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 10:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1513 SDG#: PEM15-13

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	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-007(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235570
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1514 SDG#: PEM15-14

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l		ug/l	ug/l	
02898	Acetone	67-64-1	4.5	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)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235570
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1514 SDG#: PEM15-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	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	0.035 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	34.1	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	0.0161 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.160	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0013 J	0.00076	0.0050	1
01750	Calcium	7440-70-2	7.46	0.0334	0.200	1

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

Sample Description: WS-007(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235570
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:00 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1514 SDG#: PEM15-14

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	0.0179	0.0016	0.0150	1
07055	Lead	7439-92-1	0.0336	0.0047	0.0150	1
01757	Magnesium	7439-95-4	3.76	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0193	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	0.0250	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	I132872AA	10/15/2013 05:57	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 05:57	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 14:03	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:40	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 10:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-001(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235571
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1515 SDG#: PEM15-15

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

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

Sample Description: WS-001(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235571
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1515 SDG#: PEM15-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.045 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	25.0	0.033	0.20	1
	SW-846 6010B		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0345	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	5.58	0.0334	0.200	1

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

Sample Description: WS-001(0.5-1.0)101313 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235571
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:10 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1515 SDG#: PEM15-15

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**	
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	2.69	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	I132872AA	10/15/2013 06:18	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/15/2013 06:18	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 14:32	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:45	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 10:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1
08079	HEM (oil & grease)	EPA 1664A	1	13292807902A	10/19/2013 09:04	Yolunder Y Bunch	1

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

Sample Description: WS-EB-90-101313 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235572
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1516 SDG#: PEM15-16EB

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	0.1	J	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-90-101313 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235572
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1516 SDG#: PEM15-16EB

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	0.2 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS Semivolatiles	**SW-846 8270C SIM**		**ug/l**	**ug/l**	**ug/l**	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.099	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1
Metals	**SM 2340 B-1997**		**mg/l**	**mg/l**	**mg/l**	
06256	Total Hardness as CaCO3	471-34-1	0.79	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	0.00058 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	0.238	0.0334	0.200	1

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

Sample Description: WS-EB-90-101313 Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235572
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013 11:40 by HVA

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1516 SDG#: PEM15-16EB

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	0.0465 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	I132872AA	10/14/2013 23:14	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/14/2013 23:14	Brett W Kenyon	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13289WAB026	10/17/2013 15:01	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13289WAB026	10/16/2013 16:30	Seth A Farrier	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132916256010	10/18/2013 09:45	Jennifer L Moyer	1
07035	Arsenic	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132871848010	10/18/2013 06:49	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132875713005	10/16/2013 10:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848010	10/15/2013 07:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713005	10/15/2013 16:50	Nelli S Markaryan	1

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

Sample Description: WS-TB-175-101313 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235573
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1517 SDG#: PEM15-17TB*

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

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

Sample Description: WS-TB-175-101313 Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7235573
LL Group # 1426122
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/13/2013

Submitted: 10/14/2013 11:05
Reported: 10/21/2013 11:30

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

P1517 SDG#: PEM15-17TB*

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	n-Propylbenzene	103-65-1	N.D.		0.1	0.5	1
02898	Styrene	100-42-5	N.D.		0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.		0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.		0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.		2.0	5.0	1
02898	Toluene	108-88-3	0.1	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

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	I132872AA	10/14/2013 23:35	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	I132872AA	10/14/2013 23:35	Brett W Kenyon	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426122
Reported: 10/21/13 at 11:30 AM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I132872AA	Sample number(s): 7235554-7235562,7235564-7235573								
Acetone	N.D.	3.0	5.0	ug/l	99		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	82		61-130		
Benzene	N.D.	0.1	0.5	ug/l	93		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	92		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	89		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	90		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	83		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	112		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	92		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	96		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	89		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	83		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	93		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	87		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	95		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	96		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	119		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	92		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	95		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	97		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	94		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	92		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	94		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	92		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	94		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	98		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	96		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	96		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	85		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	88		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	90		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	86		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	88		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	91		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	86		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	93		73-120		

*- 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: 1426122
Reported: 10/21/13 at 11:30 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	N.D.	0.1	0.5	ug/l	90		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	93		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	85		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	91		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	97		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Styrene	N.D.	0.1	0.5	ug/l	91		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	93		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	103		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	91		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	114		65-131		
Toluene	N.D.	0.1	0.5	ug/l	90		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	95		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	89		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	91		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	88		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	101		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	95		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	84		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	90		80-120		
Batch number: 13289WAB026	Sample number(s): 7235554-7235562,7235564-7235572								
Acenaphthene	N.D.	0.010	0.050	ug/l	91		77-118		
Acenaphthylene	N.D.	0.010	0.050	ug/l	90		80-123		
Anthracene	N.D.	0.010	0.050	ug/l	95		78-123		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	96		73-127		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	98		72-120		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	119		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	91		64-130		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	107		73-131		
Chrysene	N.D.	0.010	0.050	ug/l	96		76-125		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	90		58-131		
Fluoranthene	N.D.	0.010	0.050	ug/l	94		79-124		
Fluorene	N.D.	0.010	0.050	ug/l	90		74-115		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	91		62-130		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98		80-126		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	94		81-124		
Naphthalene	N.D.	0.030	0.050	ug/l	93		75-120		
Phenanthrene	N.D.	0.030	0.050	ug/l	94		75-120		
Pyrene	N.D.	0.010	0.050	ug/l	93		71-130		
Batch number: 132871848010	Sample number(s): 7235554-7235572								
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	105		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	99		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	107		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	98		89-110		
Nickel	N.D.	0.0015	0.0100	mg/l	105		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	102		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	95		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	100		90-110		

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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: 1426122
Reported: 10/21/13 at 11:30 AM

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132875713005	Sample number(s): 7235554-7235572								
Mercury	N.D.	0.00006 0	0.00020	mg/l	95		80-120		
Batch number: 13292807902A	Sample number(s): 7235554-7235571								
HEM (oil & grease)	N.D.	1.4	5.0	mg/l	85	91	78-114	7	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: I132872AA	Sample number(s): 7235554-7235562,7235564-7235573 UNSPK: 7235560								
Acetone	119	104	57-163	13	30				
Allyl Chloride	88	88	56-160	0	30				
Benzene	99	100	87-126	0	30				
Bromobenzene	98	99	80-123	1	30				
Bromochloromethane	94	94	82-125	1	30				
Bromodichloromethane	93	93	82-133	0	30				
Bromoform	91	91	60-138	1	30				
Bromomethane	86	88	66-130	1	30				
2-Butanone	109	94	56-160	16	30				
n-Butylbenzene	101	100	83-131	1	30				
sec-Butylbenzene	102	102	84-128	0	30				
tert-Butylbenzene	101	102	84-135	0	30				
Carbon Tetrachloride	102	101	81-148	1	30				
Chlorobenzene	98	98	78-133	0	30				
Chloroethane	88	90	70-139	2	30				
Chloroform	98	98	86-136	0	30				
Chloromethane	95	95	49-135	0	30				
2-Chlorotoluene	99	100	75-134	1	30				
4-Chlorotoluene	100	99	76-134	1	30				
1,2-Dibromo-3-chloropropane	111	96	43-143	15	30				
Dibromochloromethane	95	95	79-125	1	30				
1,2-Dibromoethane	96	96	84-127	0	30				
Dibromomethane	96	96	83-126	0	30				
1,2-Dichlorobenzene	100	100	83-117	0	30				
1,3-Dichlorobenzene	102	102	79-132	1	30				
1,4-Dichlorobenzene	101	100	79-120	0	30				
Dichlorodifluoromethane	101	102	28-136	1	30				
1,1-Dichloroethane	101	100	88-136	1	30				
1,2-Dichloroethane	96	95	82-135	1	30				
1,1-Dichloroethene	107	107	83-150	1	30				
cis-1,2-Dichloroethene	98	98	82-129	0	30				
trans-1,2-Dichloroethene	103	102	88-127	1	30				
Dichlorofluoromethane	104	104	81-161	0	30				
1,2-Dichloropropane	101	101	91-126	0	30				
1,3-Dichloropropane	97	97	80-127	0	30				
2,2-Dichloropropane	94	95	80-134	1	30				
1,1-Dichloropropene	99	99	86-139	0	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: 1426122
Reported: 10/21/13 at 11:30 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
cis-1,3-Dichloropropene	94	95	74-132	1	30				
trans-1,3-Dichloropropene	89	89	71-128	0	30				
Ethyl ether	89	90	57-139	1	30				
Ethylbenzene	98	97	80-140	1	30				
Freon 113	102	101	77-147	2	30				
Hexachlorobutadiene	102	102	65-128	1	30				
Isopropylbenzene	97	97	81-133	0	30				
p-Isopropyltoluene	101	100	84-124	1	30				
Methyl Tertiary Butyl Ether	86	88	82-132	2	30				
4-Methyl-2-Pentanone	89	90	69-149	0	30				
Methylene Chloride	101	102	77-135	0	30				
n-Propylbenzene	102	102	79-131	1	30				
Styrene	95	94	63-151	1	30				
1,1,1,2-Tetrachloroethane	97	97	87-126	0	30				
1,1,2,2-Tetrachloroethane	101	101	75-131	0	30				
Tetrachloroethene	100	99	75-129	1	30				
Tetrahydrofuran	105	91	56-154	15	30				
Toluene	97	97	83-127	0	30				
1,2,3-Trichlorobenzene	97	97	73-125	1	30				
1,2,4-Trichlorobenzene	96	96	77-120	0	30				
1,1,1-Trichloroethane	99	99	85-140	0	30				
1,1,2-Trichloroethane	99	100	85-129	1	30				
Trichloroethene	99	100	85-131	0	30				
Trichlorofluoromethane	102	101	73-139	1	30				
1,2,3-Trichloropropane	100	101	76-120	0	30				
1,2,4-Trimethylbenzene	100	99	87-126	0	30				
1,3,5-Trimethylbenzene	100	100	89-129	1	30				
Vinyl Chloride	92	94	62-135	2	30				
Xylene (Total)	97	96	81-137	1	30				
Batch number: 13289WAB026	Sample number(s): 7235554-7235562,7235564-7235572 UNSPK: 7235560								
Acenaphthene	87	88	47-136	2	30				
Acenaphthylene	94	92	33-146	1	30				
Anthracene	39*	49*	69-119	23	30				
Benzo(a)anthracene	75	77	37-150	3	30				
Benzo(a)pyrene	37*	36*	64-123	1	30				
Benzo(b)fluoranthene	90	86	33-152	3	30				
Benzo(g,h,i)perylene	65	58	36-138	10	30				
Benzo(k)fluoranthene	81	78	31-142	3	30				
Chrysene	83	81	34-135	1	30				
Dibenz(a,h)anthracene	73	63	17-134	14	30				
Fluoranthene	90	90	39-147	1	30				
Fluorene	95	93	38-149	1	30				
Indeno(1,2,3-cd)pyrene	72	62	29-143	14	30				
1-Methylnaphthalene	100	101	49-152	2	30				
2-Methylnaphthalene	98	98	51-146	1	30				
Naphthalene	97	97	58-131	2	30				
Phenanthrene	93	93	48-140	1	30				
Pyrene	79	83	59-125	7	30				
Batch number: 132871848010	Sample number(s): 7235554-7235572 UNSPK: 7235560 BKG: 7235560								
Arsenic	106	103	81-123	3	20	N.D.	N.D.	0 (1)	20

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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: 1426122
Reported: 10/21/13 at 11:30 AM

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Barium	102	100	78-118	2	20	0.0326	0.0324	1	20
Cadmium	104	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Calcium	106	95	75-125	4	20	5.36	5.36	0	20
Chromium	105	102	76-120	3	20	N.D.	N.D.	0 (1)	20
Lead	107	106	75-125	1	20	N.D.	N.D.	0 (1)	20
Magnesium	104	94	75-125	4	20	2.60	2.60	0	20
Nickel	105	104	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	103	102	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	98	95	75-125	3	20	N.D.	N.D.	0 (1)	20
Vanadium	103	101	90-117	2	20	N.D.	N.D.	0 (1)	20
Batch number: 132875713005	Sample number(s): 7235554-7235572 UNSPK: 7235560 BKG: 7235560								
Mercury	93	92	80-120	2	20	N.D.	N.D.	0 (1)	20
Batch number: 13292807902A	Sample number(s): 7235554-7235571 UNSPK: 7235560 BKG: 7235560								
HEM (oil & grease)	4*	37*	78-114	155*	29	N.D.	1.4 J	200* (1)	18

Surrogate Quality Control

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

Analysis Name: BTEX 25-ml purge
Batch number: I132872AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7235554	101	111	97	95
7235555	101	108	98	94
7235556	101	106	98	94
7235557	102	108	97	94
7235558	102	109	97	94
7235559	101	104	98	93
7235560	102	105	98	93
7235561	102	105	98	97
7235562	102	108	98	97
7235564	102	107	97	94
7235565	101	108	97	94
7235566	101	107	97	94
7235567	101	108	98	94
7235568	101	108	97	94
7235569	101	108	98	94
7235570	101	108	96	93
7235571	102	109	98	94
7235572	100	104	98	93
7235573	101	104	98	93
Blank	101	107	98	94
LCS	100	101	99	96
MS	102	105	98	97
MSD	102	108	98	97

*- Outside of specification
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Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1426122
Reported: 10/21/13 at 11:30 AM

Surrogate Quality Control

Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM
Batch number: 13289WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7235554	90	61*	97
7235555	88	69	86
7235556	78	54*	75
7235557	87	55*	87
7235558	73	61*	71
7235559	90	70	94
7235560	92	70	96
7235561	94	68	103
7235562	94	63	104
7235564	95	80	96
7235565	92	71	96
7235566	96	78	99
7235567	85	56*	92
7235568	88	67	92
7235569	80	46*	89
7235570	69	66	71
7235571	86	66	89
7235572	88	96	94
Blank	91	105	94
LCS	96	108	99
MS	94	68	103
MSD	94	63	104
Limits:	44-137	62-141	51-136

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ExxonMobil Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1426122 Sample # 723554-73
Instructions on reverse side correspond with circled numbers.

2 of 3

SCR#: _____

1 Client Information

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

3 Grab / Composite

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

5 Analyses Requested — Preservation Code

2 Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	8260B VOCs (H)	8270 SIM PAH (H)	RCRA Metals Hardness Ni,V,Ca,Mg (N)	Diss Metals (F)	HEM Oil & Grease (H)
WS-003 (Surface) 101213	10-12-13	1300	X		9	X	X	X	X	X
WS-007 (0.5-1.0) 101213	10-12-13	1320	X		9	X	X	X	X	X
WS-001 (0.5-1.0) 101213	10-12-13	1330	X		9	X	X	X	X	X
WS-EB-89-101213	10-12-13	1400	X		7	X	X	X	X	
DUP-WS-101-101213	10-12-13	—	X		9	X	X	X	X	X
WS-014 (1.5-2.0) 101313	10-13-13	0810	X		9	X	X	X	X	X
WS-014 (5.5-6.0) 101313	10-13-13	0820	X		9	X	X	X	X	X
WS-012 (1.5-2.0) 101313	10-13-13	0830	X		9	X	X	X	X	X
WS-012 (5.0-5.5) 101313	10-13-13	0840	X		9	X	X	X	X	X
WS-010 (1.5-2.0) 101313	10-13-13	0850	X		9	X	X	X	X	X
WS-010 (3.5-4.0) 101313	10-13-13	0900	X		9	X	X	X	X	X
WS-006 (0.5-1.0) 101313	10-13-13	0910	X		9	X	X	X	X	X

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

6 Remarks
Lab to filter + pressure diss metals upon receipt

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

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

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

Relinquished by	Date	Time	Received by	Date	Time
	10-13-13	1600			
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	10-14-13	1105

9

Temperature Upon Receipt 0.9-2.8°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 # 1426122 Sample # 7235554-73 | Instructions on reverse side correspond with circled numbers.

3 of 3

SCR#: _____

1 Client Information

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

3 Grab / Composite

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

5 Analyses Requested — Preservation Code

2 Sample Identification	Collected Date	Collected Time	Grab	Composite	Total # of Containers	VOCs 8260B (H)	PAH 8270SIM (H)	RCRA Metals Ni,V,Ca,Mg (N)	Diss Metals (N)	HEM Oil & Grease (H)	Remarks
WS-006(0.5-1.0)101313 MS/MSD	10-13-13	0910	X		18	X	X	X	X	X	MS/MSD
WS-005(surface)101313	10-13-13	0930	X		9	X	X	X	X	X	
WS-011(1.5-2.0)101313	10-13-13	1000	X		9	X	X	X	X	X	
WS-011 (5.0-5.5) 101313	10-13-13	1010	X		9	X	X	X	X	X	
WS-002(surface) 101313	10-13-13	1020	X		9	X	X	X	X	X	
WS-018(surface) 101313	10-13-13	1030	X		9	X	X	X	X	X	
WS-003(surface) 101313	10-13-13	1040	X		9	X	X	X	X	X	
WS-007 (0.5-1.0) 101313	10-13-13	1100	X		9	X	X	X	X	X	
WS-001 (0.5-1.0) 101313	10-13-13	1110	X		9	X	X	X	X	X	
WS-EB-90-101313	10-13-13	1140	X		7	X	X	X	X		
WS-TB-175-101313	10-13-13	—			2	X					

6 Remarks

Lab to filter + pressure diss metals upon receipt

Preservation Codes

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

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
	10-13-13	1600			
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	10-14-13	1105

Temperature Upon Receipt 0.9-2.8 °C

Custody Seals Intact? Yes / No

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Grp # 1426122

Environmental Sample Administration
Receipt Documentation Log

Client/Project: Exxon Mobil

Date of Receipt: 10-14-13

Time of Receipt: 1105

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	1.1°	TB	WI	Y	B	
2	↓	2.2°	↓	↓	↓	↓	
3	↓	2.8°	↓	↓	↓	↓	
4	↓	1.7°	↓	↓	↓	↓	
5	↓	1.2°	↓	↓	↓	↓	
6	↓	1.1°	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

received (1) amber for WS-010(1.5-2.0)101213
& (1) amber for WS-010(3.5-4.0)101213 broken

Unpacker Signature/Emp#: [signature] 2123 **Date/Time:** 10-14-13 1200

Issued by Dept. 6042 Management

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Grp #1426122

Environmental Sample Administration Receipt Documentation Log

Client/Project: Exxon Mobil

Date of Receipt: 10-14-13

Time of Receipt: 1105

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 7	DT121	1.9°	TB	WI	Y	B	
2 8	↓	0.9°	↓	↓	↓	↓	
3 9		2.2°					
4 10		1.5°					
5 11		1.4°					
6 12	—						

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Kmith 2123 **Date/Time:** 10-14-13 1200

Issued by Dept. 6042 Management

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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.