

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

August 26, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 08/20/2013

Group Number: 1412630

SDG: PEK82

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LL) #

WS-014(1.5-2.0)081713 Grab Surface Water	7167014
WS-014(5.5-6.0)081713 Grab Surface Water	7167015
WS-012(1.5-2.0)081713 Grab Surface Water	7167016
WS-012(5.0-5.5)081713 Grab Surface Water	7167017
WS-010(1.5-2.0)081713 Grab Surface Water	7167018
WS-010(3.5-4.0)081713 Grab Surface Water	7167019
WS-006(0.5-1.0)081713 Grab Surface Water	7167020
WS-005(Surface)081713 Grab Surface Water	7167021
WS-002(Surface)081713 Grab Surface Water	7167022
WS-018(Surface)081713 Grab Surface Water	7167023
WS-011(1.5-2.0)081713 Grab Surface Water	7167024
WS-011(5.0-5.5)081713 Grab Surface Water	7167025
WS-003(Surface)081713 Grab Surface Water	7167026
WS-007(0.5-1.0)081713 Grab Surface Water	7167027
WS-001(0.5-1.0)081713 Grab Surface Water	7167028
WS-BKG-002(Surface)081713 Grab Surface Water	7167029
DUP-WS-72-081713 Grab Surface Water	7167030
WS-EB-33-081713 Grab Water	7167031

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

ELECTRONIC COPY TO ExxonMobil

Attn: Michael J. Firth

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

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1412630

General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

Analysis Specific Comments:**SW-846 8270C SIM, GC/MS Semivolatiles**

Batch #: 13232WAJ026 (Sample number(s): 7167014-7167031)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 2-Methylnaphthalene, Acenaphthylene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7167020, 7167023, 7167025

Sample #s: 7167014

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

Sample #s: 7167015, 7167016, 7167017, 7167018, 7167019, 7167021, 7167024, 7167026, 7167027, 7167028, 7167029, 7167030, 7167031

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

Sample #s: 7167022

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
2-methylnaphthalene

Sample #s: 7167020, 7167023, 7167025

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

EPA 1664A, Wet Chemistry

Batch #: 13238807901A (Sample number(s): 7167014-7167030 UNSPK: 7167014)

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

Sample #s: 7167014, 7167015, 7167016, 7167017, 7167018, 7167019, 7167020, 7167021, 7167022, 7167023, 7167024, 7167025, 7167026, 7167027, 7167028, 7167029, 7167030

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

Sample Description: WS-014(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167014
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17141 SDG#: PEK82-01

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	ug/l	ug/l	ug/l	
		purge				
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167014**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17141 SDG#: PEK82-01

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	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.3	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0396	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: **WS-014(1.5-2.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167014**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17141 SDG#: PEK82-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	6.00	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.75	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 11:01	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 11:01	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 07:14	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:06	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 10:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-014(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167014
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17141 SDG#: PEK82-01

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: WS-014(5.5-6.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167015
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:25 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17142 SDG#: PEK82-02

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	ug/l	ug/l	ug/l	
		purge				
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167015**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:25 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17142 SDG#: PEK82-02

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	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.056	1
08357	Anthracene	120-12-7	N.D.	0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.056	1
08357	Chrysene	218-01-9	N.D.	0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.056	1
08357	Fluorene	86-73-7	N.D.	0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.056	1
08357	Naphthalene	91-20-3	N.D.	0.033	0.056	1
08357	Phenanthrene	85-01-8	N.D.	0.033	0.056	1
08357	Pyrene	129-00-0	N.D.	0.011	0.056	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.1	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	0.0401	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-014(5.5-6.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167015
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:25 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17142 SDG#: PEK82-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.95	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.73	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry EPA 1664A						
			mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	3.1 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 11:23	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 11:23	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 07:43	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:10	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-014(5.5-6.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167015
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:25 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17142 SDG#: PEK82-02

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-012(1.5-2.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167016**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:45 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17121 SDG#: PEK82-03

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	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167016**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:45 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17121 SDG#: PEK82-03

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	ug/l	ug/l	ug/l	
		purge				
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	0.1 J	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	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	0.0408	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-012(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167016
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:45 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17121 SDG#: PEK82-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.79	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.67	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 11:44	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 11:44	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 08:12	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:21	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-012(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167016
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:45 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17121 SDG#: PEK82-03

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: WS-012(5.0-5.5)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167017
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17122 SDG#: PEK82-04

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	ug/l	ug/l	ug/l	
		purge				
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167017**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 08:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17122 SDG#: PEK82-04

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	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.0	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	0.0440	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-012(5.0-5.5)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167017
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17122 SDG#: PEK82-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.89	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.73	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 12:06	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 12:06	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13232WAJ026	08/23/2013 08:42	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13232WAJ026	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:25	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-012(5.0-5.5)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167017
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 08:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17122 SDG#: PEK82-04

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: WS-010(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167018
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:10 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17101 SDG#: PEK82-05

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	ug/l	ug/l	ug/l	
		purge				
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167018**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:10 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17101 SDG#: PEK82-05

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	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.4	0.033	0.20	1
	SW-846 6010B	mg/l	mg/l	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0315	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167018
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:10 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17101 SDG#: PEK82-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.77	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	2.67	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.	2.4 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 12:27	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 12:27	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 09:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:29	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-010(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167018
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:10 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17101 SDG#: PEK82-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-010(3.5-4.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167019**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17102 SDG#: PEK82-06

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	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167019**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17102 SDG#: PEK82-06

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	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.056	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.056	1
08357	Anthracene	120-12-7	N.D.	0.011	0.056	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.056	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.056	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.056	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.056	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.056	1
08357	Chrysene	218-01-9	N.D.	0.011	0.056	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.056	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.056	1
08357	Fluorene	86-73-7	N.D.	0.011	0.056	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.056	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.056	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.056	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.056	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.056	1
08357	Pyrene	129-00-0	N.D.	0.011	0.056	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.1	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	0.0327	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-010(3.5-4.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167019
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17102 SDG#: PEK82-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.70	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	2.64	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 13:53	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 13:53	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 09:41	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:33	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-010(3.5-4.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167019
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17102 SDG#: PEK82-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-006(0.5-1.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167020**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17006 SDG#: PEK82-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167020**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17006 SDG#: PEK82-07

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

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

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	25.2	0.033	0.20	1

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

Sample Description: **WS-006(0.5-1.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167020**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 09:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17006 SDG#: PEK82-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
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	5.73	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	2.64	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.7 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 14:15	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 14:15	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 10:10	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:36	John P Hook	1

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

Sample Description: WS-006(0.5-1.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167020
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 09:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17006 SDG#: PEK82-07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: WS-005 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167021
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 10:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17005 SDG#: PEK82-08

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	ug/l	ug/l	ug/l	
		purge				
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) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167021**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 10:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17005 SDG#: PEK82-08

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	ug/l	ug/l	ug/l	
		purge				
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	0.1 J	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.2	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	0.0377	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-005 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167021
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 10:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17005 SDG#: PEK82-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	6.10	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	2.67	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 14:36	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 14:36	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 10:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:40	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-005(Surface)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167021
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 10:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17005 SDG#: PEK82-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-002 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167022**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 10:40 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17002 SDG#: PEK82-09

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	ug/l	ug/l	ug/l	
	purge					
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) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167022**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 10:40 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17002 SDG#: PEK82-09

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	ug/l	ug/l	ug/l	
	purge					
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	0.1 J	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	0.5 J	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	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	0.011 J	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	0.018 J	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:
 2-methylnaphthalene

Metals SM 2340 B-1997 mg/l mg/l mg/l

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

Sample Description: WS-002 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167022
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 10:40 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17002 SDG#: PEK82-09

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 CaCO ₃	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	0.0403	0.00033	0.0050	1
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	2.84	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.9 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 14:58	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 14:58	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 11:09	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO ₃	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:44	John P Hook	1

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

Sample Description: WS-002 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167022
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 10:40 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17002 SDG#: PEK82-09

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013	01:44	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013	01:44	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013	01:44	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013	11:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013	16:50	Kevin C Piaskowski	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013	11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013	08:38	Yolunder Y Bunch	1

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

Sample Description: WS-018 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167023
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17018 SDG#: PEK82-10

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	ug/l	ug/l	ug/l	
		purge				
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) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167023
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17018 SDG#: PEK82-10

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	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.9	0.033	0.20	1

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

Sample Description: **WS-018 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167023**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17018 SDG#: PEK82-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0386	0.00033	0.0050	1
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	2.85	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
		EPA 1664A	mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.7 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 15:19	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 15:19	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 11:38	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 00:43	John P Hook	1

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

Sample Description: WS-018 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167023
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17018 SDG#: PEK82-10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-011(1.5-2.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167024**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17111 SDG#: PEK82-11

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	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167024**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17111 SDG#: PEK82-11

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	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	26.0	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	0.0386	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-011(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167024
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17111 SDG#: PEK82-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.84	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0017 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.76	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 15:41	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 15:41	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 12:07	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-011(1.5-2.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167024
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17111 SDG#: PEK82-11

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-011(5.0-5.5)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167025**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17112 SDG#: PEK82-12

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	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167025**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17112 SDG#: PEK82-12

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

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	27.0	0.033	0.20	1

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

Sample Description: WS-011(5.0-5.5)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167025
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17112 SDG#: PEK82-12

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	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0505	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
01750	Calcium	7440-70-2	6.03	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0017 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.91	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	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 16:02	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 16:02	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 12:37	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katherine V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:52	John P Hook	1

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

Sample Description: WS-011(5.0-5.5)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167025
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:20 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17112 SDG#: PEK82-12

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-003 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167026**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17003 SDG#: PEK82-13

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	ug/l	ug/l	ug/l	
	purge					
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) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167026**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17003 SDG#: PEK82-13

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						
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						
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	0.018 J	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.016 J	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.024 J	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	0.025 J	0.010	0.052	1
08357	Chrysene	218-01-9	0.022 J	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	0.015 J	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.022 J	0.010	0.052	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						
Metals SM 2340 B-1997						
06256	Total Hardness as CaCO3	471-34-1	26.8	0.033	0.20	1
SW-846 6010B						
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0414	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-003 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167026
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17003 SDG#: PEK82-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	6.01	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.86	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	2.0 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 16:24	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 16:24	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 13:06	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 01:55	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-003 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167026
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:30 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17003 SDG#: PEK82-13

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-007(0.5-1.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167027**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17007 SDG#: PEK82-14

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	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-007(0.5-1.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167027**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 11:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17007 SDG#: PEK82-14

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	ug/l	ug/l	ug/l	
		purge				
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	0.015 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	14.8	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	0.0241	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-007(0.5-1.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167027
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17007 SDG#: PEK82-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	3.48	0.0334	0.200	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	1.47	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 16:46	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 16:46	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13232WAJ026	08/23/2013 13:36	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13232WAJ026	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 02:07	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-007(0.5-1.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167027
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 11:50 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17007 SDG#: PEK82-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-001(0.5-1.0)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167028**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 12:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17001 SDG#: PEK82-15

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	ug/l	ug/l	ug/l	
	purge					
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)081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167028**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 12:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17001 SDG#: PEK82-15

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	ug/l	ug/l	ug/l	
		purge				
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	24.8	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	0.0330	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: WS-001(0.5-1.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167028
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 12:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17001 SDG#: PEK82-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.65	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	2.59	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 17:07	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 17:07	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13232WAJ026	08/23/2013 14:05	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	13232WAJ026	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 02:11	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-001(0.5-1.0)081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167028
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 12:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17001 SDG#: PEK82-15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-BKG-002 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167029**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 12:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17BK2 SDG#: PEK82-16

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	ug/l	ug/l	ug/l	
	purge					
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-BKG-002 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167029**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 12:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17BK2 SDG#: PEK82-16

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	22.7	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	0.0320	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: **WS-BKG-002 (Surface) 081713 Grab Surface Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167029**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 12:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17BK2 SDG#: PEK82-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.53	0.0334	0.200	1
07051	Chromium	7440-47-3	0.0019 J	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
01757	Magnesium	7439-95-4	2.16	0.0167	0.100	1
07061	Nickel	7440-02-0	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.0021 J	0.0020	0.0050	1
SW-846 7470A						
			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
Wet Chemistry						
	EPA 1664A		mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	5.0	1
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 17:29	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 17:29	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 14:34	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 02:14	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: WS-BKG-002 (Surface) 081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167029
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 12:15 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17BK2 SDG#: PEK82-16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: DUP-WS-72-081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167030
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17D72 SDG#: PEK82-17FD

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	ug/l	ug/l	ug/l	
		purge				
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: DUP-WS-72-081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167030
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17D72 SDG#: PEK82-17FD

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	ug/l	ug/l	ug/l	
	purge					
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	N.D.	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.011	0.057	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.057	1
08357	Anthracene	120-12-7	N.D.	0.011	0.057	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.057	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.057	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.057	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.057	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.057	1
08357	Chrysene	218-01-9	N.D.	0.011	0.057	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.057	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.057	1
08357	Fluorene	86-73-7	N.D.	0.011	0.057	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.057	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.057	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.057	1
08357	Naphthalene	91-20-3	N.D.	0.034	0.057	1
08357	Phenanthrene	85-01-8	N.D.	0.034	0.057	1
08357	Pyrene	129-00-0	N.D.	0.011	0.057	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l		
06256	Total Hardness as CaCO3	471-34-1	25.1	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	0.0327	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1

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

Sample Description: DUP-WS-72-081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167030
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17D72 SDG#: PEK82-17FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
	SW-846 6010B		mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	5.71	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	2.64	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
The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.						

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	G132331AA	08/21/2013 17:51	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 17:51	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 15:04	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 02:18	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1

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

Sample Description: DUP-WS-72-081713 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7167030
LL Group # 1412630
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/17/2013 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17D72 SDG#: PEK82-17FD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1
08079	HEM (oil & grease)	EPA 1664A	1	13238807901A	08/26/2013 08:38	Yolunder Y Bunch	1

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

Sample Description: **WS-EB-33-081713 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167031**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 13:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17E33 SDG#: PEK82-18EB*

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	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	N.D.	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1

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

Sample Description: **WS-EB-33-081713 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167031**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 13:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17E33 SDG#: PEK82-18EB*

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	ug/l	ug/l	ug/l	
		purge				
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.	0.012	0.058	1
08357	Acenaphthylene	208-96-8	N.D.	0.012	0.058	1
08357	Anthracene	120-12-7	N.D.	0.012	0.058	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.012	0.058	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.012	0.058	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.012	0.058	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.012	0.058	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.012	0.058	1
08357	Chrysene	218-01-9	N.D.	0.012	0.058	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.012	0.058	1
08357	Fluoranthene	206-44-0	N.D.	0.012	0.058	1
08357	Fluorene	86-73-7	N.D.	0.012	0.058	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.012	0.058	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.012	0.058	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.012	0.058	1
08357	Naphthalene	91-20-3	N.D.	0.035	0.058	1
08357	Phenanthrene	85-01-8	N.D.	0.035	0.058	1
08357	Pyrene	129-00-0	N.D.	0.012	0.058	1

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

Metals	SM 2340 B-1997	mg/l	mg/l	mg/l
06256	Total Hardness as CaCO3	471-34-1	0.16 J	0.033
				0.20
	SW-846 6010B	mg/l	mg/l	mg/l
07035	Arsenic	7440-38-2	N.D.	0.0068
07046	Barium	7440-39-3	N.D.	0.00033
07049	Cadmium	7440-43-9	N.D.	0.00076

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

Sample Description: **WS-EB-33-081713 Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7167031**
 LL Group # **1412630**
 Account # **14739**

Project Name: **Mayflower, AR Pipeline Incident**

Collected: 08/17/2013 13:00 by HVA

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

Submitted: 08/20/2013 09:10

Reported: 08/26/2013 21:06

17E33 SDG#: PEK82-18EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals						
		SW-846 6010B	mg/l	mg/l	mg/l	
01750	Calcium	7440-70-2	0.0650 J	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	N.D.	0.0167	0.100	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	G132331AA	08/21/2013 10:40	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	G132331AA	08/21/2013 10:40	Jason M Long	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	132321848006	08/23/2013 15:33	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	132321848006	08/21/2013 08:50	Katheryne V Sponheimer	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132376256001	08/25/2013 06:41	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07046	Barium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
01750	Calcium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07051	Chromium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07055	Lead	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
01757	Magnesium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07061	Nickel	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07036	Selenium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07066	Silver	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132321848006	08/25/2013 02:22	John P Hook	1
00259	Mercury	SW-846 7470A	1	132325713006	08/22/2013 11:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132321848006	08/21/2013 16:50	Kevin C Piaskowski	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132325713006	08/21/2013 11:55	Katlin N Cataldi	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: G132331AA	Sample number(s): 7167014-7167031								
Acetone	N.D.	3.0	5.0	ug/l	86		60-139		
Allyl Chloride	N.D.	0.1	0.5	ug/l	90		61-130		
Benzene	N.D.	0.1	0.5	ug/l	98		80-120		
Bromobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Bromochloromethane	N.D.	0.1	0.5	ug/l	109		80-125		
Bromodichloromethane	N.D.	0.1	0.5	ug/l	99		80-120		
Bromoform	N.D.	0.1	0.5	ug/l	103		73-128		
Bromomethane	N.D.	0.1	0.5	ug/l	105		62-126		
2-Butanone	N.D.	1.0	5.0	ug/l	93		70-130		
n-Butylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
sec-Butylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
tert-Butylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
Carbon Tetrachloride	N.D.	0.1	0.5	ug/l	108		80-129		
Chlorobenzene	N.D.	0.1	0.5	ug/l	104		80-120		
Chloroethane	N.D.	0.1	0.5	ug/l	95		68-120		
Chloroform	N.D.	0.1	0.5	ug/l	106		80-120		
Chloromethane	N.D.	0.2	0.5	ug/l	94		55-120		
2-Chlorotoluene	N.D.	0.1	0.5	ug/l	99		80-120		
4-Chlorotoluene	N.D.	0.1	0.5	ug/l	97		80-120		
1,2-Dibromo-3-chloropropane	N.D.	0.2	0.5	ug/l	106		64-141		
Dibromochloromethane	N.D.	0.1	0.5	ug/l	100		80-126		
1,2-Dibromoethane	N.D.	0.1	0.5	ug/l	100		80-120		
Dibromomethane	N.D.	0.1	0.5	ug/l	100		80-120		
1,2-Dichlorobenzene	N.D.	0.1	0.5	ug/l	103		80-120		
1,3-Dichlorobenzene	N.D.	0.1	0.5	ug/l	106		80-120		
1,4-Dichlorobenzene	N.D.	0.1	0.5	ug/l	105		80-120		
Dichlorodifluoromethane	N.D.	0.1	0.5	ug/l	103		39-120		
1,1-Dichloroethane	N.D.	0.1	0.5	ug/l	98		80-120		
1,2-Dichloroethane	N.D.	0.1	0.5	ug/l	110		80-127		
1,1-Dichloroethene	N.D.	0.1	0.5	ug/l	102		80-123		
cis-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	101		80-120		
trans-1,2-Dichloroethene	N.D.	0.1	0.5	ug/l	104		80-120		
Dichlorofluoromethane	N.D.	0.2	0.5	ug/l	115		75-145		
1,2-Dichloropropane	N.D.	0.1	0.5	ug/l	98		80-120		
1,3-Dichloropropane	N.D.	0.1	0.5	ug/l	93		80-120		
2,2-Dichloropropane	N.D.	0.1	0.5	ug/l	104		75-122		
1,1-Dichloropropene	N.D.	0.1	0.5	ug/l	105		80-121		
cis-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	98		80-123		
trans-1,3-Dichloropropene	N.D.	0.1	0.5	ug/l	93		80-120		
Ethyl ether	N.D.	0.1	0.5	ug/l	95		59-130		
Ethylbenzene	N.D.	0.1	0.5	ug/l	100		80-120		
Freon 113	N.D.	0.2	0.5	ug/l	106		78-132		
Hexachlorobutadiene	N.D.	0.1	0.5	ug/l	111		73-120		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Isopropylbenzene	N.D.	0.1	0.5	ug/l	104		80-120		
p-Isopropyltoluene	N.D.	0.1	0.5	ug/l	98		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.1	0.5	ug/l	99		80-120		
4-Methyl-2-Pentanone	N.D.	1.0	5.0	ug/l	93		69-135		
Methylene Chloride	N.D.	0.2	0.5	ug/l	98		80-120		
n-Propylbenzene	N.D.	0.1	0.5	ug/l	94		80-120		
Styrene	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,1,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	101		80-120		
1,1,2,2-Tetrachloroethane	N.D.	0.1	0.5	ug/l	88		80-125		
Tetrachloroethene	N.D.	0.1	0.5	ug/l	116		80-120		
Tetrahydrofuran	N.D.	2.0	5.0	ug/l	91		65-131		
Toluene	N.D.	0.1	0.5	ug/l	98		80-120		
1,2,3-Trichlorobenzene	N.D.	0.1	0.5	ug/l	93		63-120		
1,2,4-Trichlorobenzene	N.D.	0.1	0.5	ug/l	103		70-120		
1,1,1-Trichloroethane	N.D.	0.1	0.5	ug/l	109		80-120		
1,1,2-Trichloroethane	N.D.	0.1	0.5	ug/l	96		80-120		
Trichloroethene	N.D.	0.1	0.5	ug/l	107		80-120		
Trichlorofluoromethane	N.D.	0.1	0.5	ug/l	124		77-132		
1,2,3-Trichloropropane	N.D.	0.3	1.0	ug/l	95		80-120		
1,2,4-Trimethylbenzene	N.D.	0.1	0.5	ug/l	98		80-120		
1,3,5-Trimethylbenzene	N.D.	0.1	0.5	ug/l	97		80-120		
Vinyl Chloride	N.D.	0.1	0.5	ug/l	102		65-127		
Xylene (Total)	N.D.	0.1	0.5	ug/l	102		80-120		

Batch number: 13232WAJ026

Sample number(s): 7167014-7167031

Acenaphthene	N.D.	0.010	0.050	ug/l	109	109	77-118	0	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	126*	123	80-123	2	30
Anthracene	N.D.	0.010	0.050	ug/l	118	101	78-123	15	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	108	116	73-127	8	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	106	105	72-120	1	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	94	104	79-136	11	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	97	100	64-130	4	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	90	97	73-131	7	30
Chrysene	N.D.	0.010	0.050	ug/l	102	97	76-125	5	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	92	95	58-131	3	30
Fluoranthene	N.D.	0.010	0.050	ug/l	103	83	79-124	22	30
Fluorene	N.D.	0.010	0.050	ug/l	113	111	74-115	2	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	91	99	62-130	8	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	124	124	80-126	0	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	128*	126*	81-124	2	30
Naphthalene	N.D.	0.030	0.050	ug/l	110	108	75-120	1	30
Phenanthrene	N.D.	0.030	0.050	ug/l	112	114	75-120	2	30
Pyrene	N.D.	0.010	0.050	ug/l	103	92	71-130	11	30

Batch number: 132321848006

Sample number(s): 7167014-7167031

Arsenic	N.D.	0.0068	0.0200	mg/l	104		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	106		90-112		
Calcium	N.D.	0.0334	0.200	mg/l	105		90-110		
Chromium	N.D.	0.0016	0.0150	mg/l	105		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	108		88-110		
Magnesium	N.D.	0.0167	0.100	mg/l	104		90-110		
Nickel	N.D.	0.0015	0.0100	mg/l	109		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	102		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	97		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	105		90-110		

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCS %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 132325713006 Mercury	Sample number(s): 7167014-7167031								
	N.D.	0.00006	0.00020	mg/l	100		80-120		
		0							
Batch number: 13238807901A HEM (oil & grease)	Sample number(s): 7167014-7167030								
	1.5	J 1.4	5.0	mg/l	97	98	78-114	1	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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: G132331AA	Sample number(s): 7167014-7167031 UNSPK: 7167014								
Acetone	92	91	57-163	2	30				
Allyl Chloride	97	99	56-160	2	30				
Benzene	103	106	87-126	3	30				
Bromobenzene	103	108	80-123	5	30				
Bromochloromethane	110	116	82-125	5	30				
Bromodichloromethane	101	105	82-133	4	30				
Bromoform	100	106	60-138	5	30				
Bromomethane	107	110	66-130	3	30				
2-Butanone	93	95	56-160	2	30				
n-Butylbenzene	99	103	83-131	4	30				
sec-Butylbenzene	103	106	84-128	3	30				
tert-Butylbenzene	106	109	84-135	3	30				
Carbon Tetrachloride	119	123	81-148	4	30				
Chlorobenzene	107	110	78-133	3	30				
Chloroethane	101	104	70-139	4	30				
Chloroform	110	113	86-136	3	30				
Chloromethane	97	99	49-135	2	30				
2-Chlorotoluene	101	106	75-134	4	30				
4-Chlorotoluene	99	103	76-134	4	30				
1,2-Dibromo-3-chloropropane	107	114	43-143	6	30				
Dibromochloromethane	99	104	79-125	5	30				
1,2-Dibromoethane	97	101	84-127	4	30				
Dibromomethane	101	105	83-126	3	30				
1,2-Dichlorobenzene	105	109	83-117	4	30				
1,3-Dichlorobenzene	108	111	79-132	3	30				
1,4-Dichlorobenzene	106	109	79-120	3	30				
Dichlorodifluoromethane	105	101	28-136	4	30				
1,1-Dichloroethane	103	107	88-136	4	30				
1,2-Dichloroethane	107	112	82-135	4	30				
1,1-Dichloroethene	111	114	83-150	3	30				
cis-1,2-Dichloroethene	105	109	82-129	4	30				
trans-1,2-Dichloroethene	111	113	88-127	2	30				
Dichlorofluoromethane	118	121	81-161	3	30				
1,2-Dichloropropane	101	104	91-126	3	30				
1,3-Dichloropropane	91	94	80-127	3	30				
2,2-Dichloropropane	111	116	80-134	4	30				
1,1-Dichloropropene	114	118	86-139	3	30				

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
cis-1,3-Dichloropropene	97	102	74-132	5	30				
trans-1,3-Dichloropropene	91	94	71-128	3	30				
Ethyl ether	91	96	57-139	5	30				
Ethylbenzene	105	108	80-140	3	30				
Freon 113	118	112	77-147	5	30				
Hexachlorobutadiene	121	125	65-128	3	30				
Isopropylbenzene	110	113	81-133	3	30				
p-Isopropyltoluene	103	107	84-124	4	30				
Methyl Tertiary Butyl Ether	96	101	82-132	5	30				
4-Methyl-2-Pentanone	91	94	69-149	4	30				
Methylene Chloride	100	102	77-135	2	30				
n-Propylbenzene	99	102	79-131	2	30				
Styrene	103	107	63-151	4	30				
1,1,1,2-Tetrachloroethane	104	110	87-126	6	30				
1,1,2,2-Tetrachloroethane	86	90	75-131	5	30				
Tetrachloroethene	126	129	75-129	2	30				
Tetrahydrofuran	90	90	56-154	0	30				
Toluene	103	106	83-127	2	30				
1,2,3-Trichlorobenzene	95	100	73-125	6	30				
1,2,4-Trichlorobenzene	105	109	77-120	4	30				
1,1,1-Trichloroethane	117	121	85-140	3	30				
1,1,2-Trichloroethane	95	99	85-129	4	30				
Trichloroethene	113	118	85-131	4	30				
Trichlorofluoromethane	132	132	73-139	0	30				
1,2,3-Trichloropropane	95	99	76-120	5	30				
1,2,4-Trimethylbenzene	102	105	87-126	4	30				
1,3,5-Trimethylbenzene	101	105	89-129	4	30				
Vinyl Chloride	109	110	62-135	2	30				
Xylene (Total)	107	110	81-137	4	30				

Batch number: 132321848006	Sample number(s): 7167014-7167031 UNSPK: 7167023 BKG: 7167023								
Arsenic	105	105	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	103	105	78-118	2	20	0.0386	0.0395	2	20
Cadmium	104	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Calcium	105	107	81-118	1	20	6.05	6.22	3	20
Chromium	103	104	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	107	107	75-125	0	20	N.D.	N.D.	0 (1)	20
Magnesium	103	104	75-125	1	20	2.85	2.92	2	20
Nickel	106	107	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	101	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	100	101	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	104	104	90-111	0	20	N.D.	N.D.	0 (1)	20

Batch number: 132325713006	Sample number(s): 7167014-7167031 UNSPK: 7167014 BKG: 7167014								
Mercury	99	97	80-120	2	20	N.D.	N.D.	0 (1)	20

Batch number: 13238807901A	Sample number(s): 7167014-7167030 UNSPK: 7167014								
HEM (oil & grease)	69*		78-114						

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

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: G132331AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7167014	105	100	97	95
7167015	105	103	97	96
7167016	105	101	96	95
7167017	104	100	97	95
7167018	105	102	96	95
7167019	106	102	97	96
7167020	104	100	97	96
7167021	104	101	96	97
7167022	104	102	96	95
7167023	104	101	97	95
7167024	105	102	98	96
7167025	105	100	97	95
7167026	105	101	96	96
7167027	104	102	97	96
7167028	105	102	97	95
7167029	106	101	97	96
7167030	105	102	97	94
7167031	105	101	97	96
Blank	104	102	96	95
LCS	105	100	98	96
MS	105	98	98	96
MSD	105	102	98	96
<hr/>				
Limits:	77-114	74-113	77-110	78-110

Analysis Name: PAHs in waters by SIM

Batch number: 13232WAJ026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7167014	97	72	111
7167015	97	76	111
7167016	94	68	108
7167017	96	68	111
7167018	91	65	106
7167019	89	64	109
7167020	89	57*	109
7167021	96	68	111
7167022	99	75	109
7167023	95	50*	109
7167024	97	67	113
7167025	94	58*	106
7167026	99	72	108
7167027	90	85	108
7167028	94	64	109
7167029	94	70	107
7167030	92	66	101
7167031	102	95	106
Blank	99	95	102

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 09:06 PM

Group Number: 1412630

Surrogate Quality Control

LCS	95	105	114
LCSD	76	105	113
Limits:	44-137	62-141	51-136

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1412430 Sample # 7167014-31

Instructions on reverse side correspond with circled numbers.

1 of 3

1 Client Information				4 Matrix			5 Analyses Requested										6 Remarks														
Facility #/SID <u>Mayflower Pipeline Incident</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	<input type="checkbox"/> Water <input type="checkbox"/> NPDES <input type="checkbox"/> Air	<input type="checkbox"/> Oil <input type="checkbox"/> Air	Preservation Code										SCR#: _____														
Site Address <u>Mayflower, AR</u>							<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">H</td><td style="width: 25%;">N</td><td style="width: 25%;">H</td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td> </tr> </table>										H	N	H												
H	N	H																													
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		Total # of Containers <u>VOL 8760B</u> <u>PAHS 8070 SEM</u> <u>RCA Metals N/A, G, M, F</u> <u>Diss. Metals</u> <u>HEM Oil release</u>										6 Remarks <u>Lab to filter + preserve diss. metals upon receipt</u>																	
Consultant/Office <u>ARCADIS</u>																															
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-202-6799</u>																													
Sampler <u>H. Van Allen</u>				3																											
2 Sample Identification		Collected		Grab	Composite																										
Date	Time																														
<u>WS-014 (1.5-2.0) 081713</u>	<u>8/17/13</u>	<u>820</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-014 (5.5-6.0) 081713</u>		<u>825</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-012 (1.5-2.0) 081713</u>		<u>845</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-012 (5.0-5.5) 081713</u>		<u>850</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-010 (1.5-2.0) 081713</u>		<u>910</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-010 (3.5-4.0) 081713</u>		<u>915</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-006 (0.5-1.0) 081713</u>		<u>930</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-005 (Surface) 081713</u>		<u>1000</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-002 (Surface) 081713</u>		<u>1040</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-018 (Surface) 081713</u>		<u>1100</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-011 (1.5-2.0) 081713</u>		<u>1115</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	
<u>WS-011 (5.0-5.5) 081713</u>		<u>1120</u>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																	

7 Turnaround Time Requested (TAT) (please circle)				9	
Standard	<u>5 day</u>	4 day		Date	Time
8 Data Package (circle if required)				9	
Type I - Full		Type VI (Raw Data)		Date	Time
NJ Reduced		Other _____			
Other _____					
Relinquished by <u>[Signature]</u>				Date <u>8/13/13</u> Time <u>1800</u>	
Relinquished by _____				Date _____ Time _____	
Relinquished by _____				Date _____ Time _____	
Relinquished by Commercial Carrier				Received by _____	
UPS <input checked="" type="checkbox"/> FedEx _____ Other <u>Southeast</u>				Date <u>8-20-13</u> Time <u>910</u>	
Temperature Upon Receipt <u>0.3-2.6</u>				Custody Seals Intact? <u>Yes</u> No	

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1412630 Sample # 7167014-31

Instructions on reverse side correspond with circled numbers.

2 of 3

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks					
Facility #/SID <u>Mayflower Pipeline Incident</u>				Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Water <input type="checkbox"/> Air <input type="checkbox"/>				Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other					
Site Address <u>Mayflower, AR</u>								H N H															
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		Total # of Containers <u>VOC 82605</u> <u>PAHs 8270 SIM</u> <u>RCRA metals hardness May, Va, Wg.</u> <u>Diss. Metals</u> <u>HEM oil grease</u>																			
Consultant/Office <u>ARCADIS</u>																							
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-202-6799</u>																					
Sampler <u>H. Van Allen</u>																							
2 Sample Identification			3 Collected																				
			Date	Time	Grab	Composite																	
<u>WS-003(surface)081713</u>			<u>8/17/13</u>	<u>1130</u>	<u>X</u>		<u>X</u>																
<u>WS-007(0.5-1.0)081713</u>			↓	<u>1150</u>	<u>X</u>		<u>X</u>																
<u>WS-001(0.5-1.0)081713</u>			↓	<u>1200</u>	<u>X</u>		<u>X</u>																
<u>WS-BKG-002(surface)081713</u>			↓	<u>1215</u>	<u>X</u>		<u>X</u>																
<u>DUP-WS-72081713</u>			↓	<u>—</u>	<u>X</u>		<u>X</u>																
<u>WS-EB-33-081713</u>			↓	<u>1300</u>																			
<u>WS-TB-126-081813</u>			<u>8/18/13</u>	<u>—</u>																			
<u>WS-014(1.5-2.0)081813</u>			↓	<u>835</u>	<u>X</u>		<u>X</u>																
<u>WS-014(5.5-6.0)081813</u>			↓	<u>840</u>	<u>X</u>		<u>X</u>																
<u>WS-012(1.5-2.0)081813</u>			↓	<u>905</u>	<u>X</u>		<u>X</u>																
<u>WS-012(5.0-5.5)081813</u>			↓	<u>910</u>	<u>X</u>		<u>X</u>																
<u>WS-010(1.5-2.0)081813</u>			↓	<u>930</u>	<u>X</u>		<u>X</u>																
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>H. Van Allen</u>				Date <u>8/18/13</u>		Time <u>1800</u>		Received by		Date		Time							
Standard <u>5 day</u> 4 day																							
72 hour 48 hour 24 hour																							
8 Data Package (circle if required)				Relinquished by Commercial Carrier				Date		Time		Received by		Date		Time							
Type I - Full				UPS <input checked="" type="checkbox"/> FedEx _____ Other <u>Southwest</u>								<u>B. Beverly Barrick</u>		<u>8-20-13</u>		<u>9:10</u>							
Type VI (Raw Data)																							
NJ Reduced																							
Other _____																							
Temperature Upon Receipt <u>0.3-2.4 °C</u>										Custody Seals Intact? <u>Yes</u> No													

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

Environmental Sample Administration 1412630
 Receipt Documentation Log

Client/Project: Exxon mobil
 Date of Receipt: 8.20.13
 Time of Receipt: 910
 Source Code: 60-1

Shipping Container Sealed: YES NO
 Custody Seal Present * : YES NO
 * Custody seal was intact unless otherwise noted in the discrepancy section
 Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D146	0.5	TB	WI	X	B	
2	↓	0.5	↓	↓	↓	↓	
3	↓	1.6	↓	↓	↓	↓	
4	↓	0.5	↓	↓	↓	↓	
5	↓	0.6	↓	↓	↓	↓	
6	↓	1.0	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems: 81813 RUC 8/21/13
WS-007 (0.5-1.0) Time = 1210 Grs 1412650 + 1412654
EB -034 Rec ? Total Did not Rec O2G
Gr 1412650

Unpacker Signature/Emp#: Brenely Baely 2299 Date/Time: 8.20.13 1035

Issued by Dept. 6042 Management

Environmental Sample Administration
Receipt Documentation Log

1412630

Client/Project: Exxon mobil
Date of Receipt: 8.20.13
Time of Receipt: 910
Source Code: 60-1

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

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

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
17	DH46	2.1	TB	WI	X	B	
18		2.4					
19		0.5					
20		2.1					
21		0.3					
22	∨	0.8	∨	∨	∨	∨	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Brenely Baugh 2299 Date/Time: 8.20.13 1035

Issued by Dept. 6042 Management

Environmental Sample Administration
Receipt Documentation Log

1412630

Client/Project: Exxon mobil
Date of Receipt: 8-20-13
Time of Receipt: 910
Source Code: 60-1

Shipping Container Sealed: YES NO
Custody Seal Present * : YES NO
* Custody seal was intact unless otherwise noted in the discrepancy section
Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
13	DH146	1.7	TB	WI	Y	B	
14	↓	0.6	↓	↓	↓	↓	
15	↓	2.4	↓	↓	↓	↓	
4	/						
5	/						
6	/						

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Buanely Bauley 2299 Date/Time: 8-20-13 1035

Issued by Dept. 6042 Management

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 \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

Inorganic Qualifiers

- B** Value is $<$ CRDL, but \geq IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- *** Duplicate analysis not within control limits
- +** Correlation coefficient for MSA <0.995

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

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

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

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

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