ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
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Prepared for:

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

September 05, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 08/30/2013
Group Number: 1415368
SDG: PEL14
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)082913 Filt Grab Surface Water	7180739
WS-014(5.5-6.0)082913 Filt Grab Surface Water	7180740
WS-012(1.5-2.0)082913 Filt Grab Surface Water	7180741
WS-012(5.0-5.5)082913 Filt Grab Surface Water	7180742
WS-010(1.5-2.0)082913 Filt Grab Surface Water	7180743
WS-010(3.5-4.0)082913 Filt Grab Surface Water	7180744
WS-006(0.5-1.0)082913 Filt Grab Surface Water	7180745
WS-005(Surface)082913 Filt Grab Surface Water	7180746
WS-002(Surface)082913 Filt Grab Surface Water	7180747
WS-018(Surface)082913 Filt Grab Surface Water	7180748
WS-011(1.5-2.0)082913 Filt Grab Surface Water	7180749
WS-011(5.0-5.5)082913 Filt Grab Surface Water	7180750
WS-003(Surface)082913 Filt Grab Surface Water	7180751
WS-007(0.5-1.0)082913 Filt Grab Surface Water	7180752
WS-001(0.5-1.0)082913 Filt Grab Surface Water	7180753
DUP-WS-79-082913 Filt Grab Surface Water	7180754
WS-EB-045-082913 Filt Grab Water	7180755

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

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

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

Respectfully Submitted,

Katherine A. Klinefelter

Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1415368

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:

No additional comments are necessary.

Sample Description: WS-014(1.5-2.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180739
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 08:30 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2914F SDG#: PEL14-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0103	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 20:39	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:38	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-014(5.5-6.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180740
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 08:40 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

29F14 SDG#: PEL14-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0102	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 20:43	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-012(1.5-2.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180741
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 09:00 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2912F SDG#: PEL14-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0174	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 20:54	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-012(5.0-5.5)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180742
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 09:10 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

29F12 SDG#: PEL14-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0202	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 20:58	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-010(1.5-2.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180743
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 09:25 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2910F SDG#: PEL14-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0141	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:02	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-010(3.5-4.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180744
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 09:35 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

29F10 SDG#: PEL14-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0302	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:06	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 08:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180745
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 09:45 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2906F SDG#: PEL14-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0176	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 20:16	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-005(Surface)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180746
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 10:25 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2905F SDG#: PEL14-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0161	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:10	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-002(Surface)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180747
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 10:50 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2902F SDG#: PEL14-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0123	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:13	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-018(Surface)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180748
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 12:35 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2918F SDG#: PEL14-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0454	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:17	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-011(1.5-2.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180749
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 11:10 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2911F SDG#: PEL14-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0045 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:21	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-011(5.0-5.5)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180750
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 11:20 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

29F11 SDG#: PEL14-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0068	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:25	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-003(Surface)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180751
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 12:45 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2903F SDG#: PEL14-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0109	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:29	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180752
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 13:05 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2907F SDG#: PEL14-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0136	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:40	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180753
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 13:20 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2901F SDG#: PEL14-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.0163	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:44	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: DUP-WS-79-082913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180754
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2979F SDG#: PEL14-16FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**SW-846 6010B**		**mg/l**	**mg/l**	**mg/l**	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0180	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Sample Description: WS-EB-045-082913 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7180755
LL Group # 1415368
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/29/2013 14:00 by TM

Submitted: 08/30/2013 09:30
Reported: 09/05/2013 10:02

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

2945F SDG#: PEL14-17EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved	**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	0.00052 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	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
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

This sample was filtered in the lab for dissolved metals.

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
07035	Arsenic	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07046	Barium	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07051	Chromium	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07055	Lead	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07061	Nickel	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07036	Selenium	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07066	Silver	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132461848004	09/04/2013 21:51	John P Hook	1
00259	Mercury	SW-846 7470A	1	132435713001	09/03/2013 09:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132461848004	09/04/2013 09:20	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132435713001	09/02/2013 08:50	Damary Valentin	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1415368
Reported: 09/05/13 at 10:02 AM

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

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132435713001	Sample number(s): 7180739-7180755								
Mercury	N.D.	0.00006 0	0.00020	mg/l	97		80-120		
Batch number: 132461848004	Sample number(s): 7180739-7180755								
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		
Chromium	N.D.	0.0016	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	110		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	109		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	104		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	103		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	98		90-110		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132435713001	Sample number(s): 7180739-7180755 UNSPK: 7180739 BKG: 7180739								
Mercury	94	91	80-120	4	20	N.D.	N.D.	0 (1)	20
Batch number: 132461848004	Sample number(s): 7180739-7180755 UNSPK: 7180745 BKG: 7180745								
Arsenic	105	106	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	105	106	78-118	0	20	0.0176	0.0182	3 (1)	20
Cadmium	105	105	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	102	104	81-120	2	20	N.D.	N.D.	0 (1)	20
Lead	108	109	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	108	108	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	105	103	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	102	104	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	100	101	90-111	1	20	N.D.	N.D.	0 (1)	20

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

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 | For Eurofins Lancaster Laboratories Environmental use only Group # 1415368 Sample # 7180739-55

Instructions on reverse side correspond with circled numbers.

pg. 1 of 2

SCR#: _____

(1) Client Information

Facility #/SID: MayFlower Pipeline Incident

Site Address: MayFlower, AR

ExxonMobil PM: Scott Bushnoe | Cost Center/AFE:

Consultant/Office: Arcadis

Consultant PM: Steve Berrick | Consultant Phone #: 919-302-6799

Sampler: Tyler Milburn / Johnny Beasley

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

(5) Analyses Requested — Preservation Code

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

(6) Remarks: Lab to filter & preserve Diss. Metals upon receipt

(2) Sample Identification	Collected Date	Collected Time	(3) Grab	(3) Composite	Total # of Containers	H: VOCs 8260B	PAH 8270 SIM	N: RCRA metals + Ni, V, Ca, Mg hardness	Diss. metals	H: HEM Oil & Grease
WS-014(1.5-2.0)082913	8/29/13	830	✓		9	✓	✓	✓	✓	✓
WS-014(5.5-6.0)082913		840	✓		9	✓	✓	✓	✓	✓
WS-012(1.5-2.0)082913		900	✓		9	✓	✓	✓	✓	✓
WS-012(5.0-5.5)082913		910	✓		9	✓	✓	✓	✓	✓
WS-010(1.5-2.0)082913		925	✓		9	✓	✓	✓	✓	✓
WS-010(3.5-4.0)082913		935	✓		9	✓	✓	✓	✓	✓
WS-006(0.5-1.0)082913		945	✓		9	✓	✓	✓	✓	✓
WS-005(Surface)082913		1025	✓		9	✓	✓	✓	✓	✓
WS-002(Surface)082913		1050	✓		9	✓	✓	✓	✓	✓
WS-018(Surface)082913		1235	✓		9	✓	✓	✓	✓	✓
WS-011(1.5-2.0)082913		1110	✓		9	✓	✓	✓	✓	✓
WS-011(5.0-5.5)082913		1120	✓		9	✓	✓	✓	✓	✓

(7) Turnaround Time Requested (TAT) (please circle)

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

(8) Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
Tyler Milburn	8/29/13	1500			

Relinquished by Commercial Carrier: UPS ✓ FedEx ____ Other ____

Received by: C Eshelman | Date: 8/30/13 | Time: 0930

Temperature Upon Receipt: 0.5 - 1.6 °C

Custody Seals Intact? Yes / No

(9)

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 — For Eurofins Lancaster Laboratories Environmental use only: Group # 1415368 Sample # 7180739-55
Instructions on reverse side correspond with circled numbers.

SCR#: _____

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: Arcadis
Consultant PM: Steve Borrick
Consultant Phone #: 919-302-6799
Sampler: Tyler Milburn / Johnny Beasley

Preservation Codes

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

6 Remarks

Lab to filter & preserve Diss. Metals upon receipt.

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	4 Matrix: Soil	Water	Oil	Total # of Containers	5 Analyses Requested (Preservation Code): VOCs 8260B (H)	PAH 8270 SIM (H)	RCRA Metals + Ni, V, Ca, Mg (N)	Diss. Metals (H)	HEM Oil & Grease (H)
WS-003 (surface) 082913	8/29/13	1245	✓			✓		9	✓	✓	✓	✓	✓
WS-007 (0.5-1.0) 082913		1305	✓			✓		9	✓	✓	✓	✓	✓
WS-001 (0.5-1.0) 082913		1320	✓			✓		9	✓	✓	✓	✓	✓
Dup-WS-79-082913		—	✓			✓		9	✓	✓	✓	✓	✓
WS-EB-045-082913		1400	✓			✓		7	✓	✓	✓	✓	
WS-TB-136-082913		—	✓			✓		2	✓				

7 Turnaround Time Requested (TAT) (please circle)

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

8 Data Package (circle if required)

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

EDD (circle if required)

Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
Tyler Miller	8/29/13	1500			
Relinquished by Commercial Carrier: UPS ✓ FedEx ____ Other ____			Cashn	8/30/13	0930

Temperature Upon Receipt 0.5-1.6 °C

Custody Seals Intact? (Yes) No

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Environmental Sample Administration Receipt Documentation Log

1415368

Client/Project: Mayflower Water

Date of Receipt: 8/30/13

Time of Receipt: 0930

Source Code: 60-1

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	0.5	TB	WI	Y	B	
2	↓	1.6	↓	↓	↓	↓	
3	↓	1.4	↓	↓	↓	↓	
4	↓	1.5	↓	↓	↓	↓	
5	↓	0.9	↓	↓	↓	↓	
6	↓	0.5	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: CEshelman 3647 **Date/Time:** 8/30/13 1000

Issued by Dept. 6042 Management

2174.06

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Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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