

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

October 25, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/18/2013

Group Number: 1427380

SDG: PEM28

PO Number: B0086003.1301

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-014(1.5-2.0)101713 Filt Grab Surface Water	7242083
WS-014(5.5-6.0)101713 Filt Grab Surface Water	7242084
WS-012(1.5-2.0)101713 Filt Grab Surface Water	7242085
WS-012(5.0-5.5)101713 Filt Grab Surface Water	7242086
WS-010(1.5-2.0)101713 Filt Grab Surface Water	7242087
WS-010(3.5-4.0)101713 Filt Grab Surface Water	7242088
WS-006(0.5-1.0)101713 Filt Grab Surface Water	7242089
WS-006(0.5-1.0)101713MS Filt Grab Surface Water	7242090
WS-006(0.5-1.0)101713MSD Filt Grab Surface Water	7242091
WS-006(0.5-1.0)101713DUP Filt Grab Surface Water	7242092
WS-005(Surface)101713 Filt Grab Surface Water	7242093
WS-011(1.5-2.0)101713 Filt Grab Surface Water	7242094
WS-011(5.0-5.5)101713 Filt Grab Surface Water	7242095
WS-002(Surface)101713 Filt Grab Surface Water	7242096
WS-018(Surface)101713 Filt Grab Surface Water	7242097
WS-003(Surface)101713 Filt Grab Surface Water	7242098
WS-007(0.5-1.0)101713 Filt Grab Surface Water	7242099
WS-001(0.5-1.0)101713 Filt Grab Surface Water	7242100
WS-EB-094-101713 Filt Grab Water	7242101

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

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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		

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1427380

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: WS-014(1.5-2.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242083
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 09:00 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1714F SDG#: PEM28-01

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	0.0149	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	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:00	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-014(5.5-6.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242084
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

17F14 SDG#: PEM28-02

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	0.0151	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	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:04	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

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Sample Description: WS-012(1.5-2.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242085
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 09:15 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1712F SDG#: PEM28-03

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	0.0172	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	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:16	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-012(5.0-5.5)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242086
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 09:20 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

17F12 SDG#: PEM28-04

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	0.0177	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	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:20	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

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Sample Description: WS-010(1.5-2.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242087
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 09:30 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1710F SDG#: PEM28-05

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	0.0185	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	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:24	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-010(3.5-4.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242088
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 09:40 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

17F10 SDG#: PEM28-06

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	0.0187	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	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:28	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242089
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1706F SDG#: PEM28-07BKG

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	0.0184	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	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 16:37	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)101713MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242090
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1706F SDG#: PEM28-07MS

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	0.154	0.0068	0.0200	1
07046	Barium	7440-39-3	2.05	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0521	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.206	0.0016	0.0150	1
07055	Lead	7439-92-1	0.154	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.522	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.151	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0581	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.494	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0010	0.000060	0.00020	1

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	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 16:48	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)101713MSD Filtr Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242091
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1706F SDG#: PEM28-07MSD

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	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.07	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0514	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.206	0.0016	0.0150	1
07055	Lead	7439-92-1	0.156	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.523	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.153	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0591	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.494	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	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	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 16:52	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)101713DUP Filtr Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242092
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1706F SDG#: PEM28-07DUP

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	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 16:44	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

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

Sample Description: WS-005 (Surface) 101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242093
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 10:50 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1705F SDG#: PEM28-08

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	0.0168	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	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:32	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-011(1.5-2.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242094
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 11:00 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1711F SDG#: PEM28-09

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	0.0195	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	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:36	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-011(5.0-5.5)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242095
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 11:10 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

17F11 SDG#: PEM28-10

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	0.0210	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	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:40	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-002 (Surface)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242096
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 11:20 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1702F SDG#: PEM28-11

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	0.0158	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	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:43	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-018 (Surface) 101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242097
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 12:20 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1718F SDG#: PEM28-12

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	0.0214	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	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:47	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

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

Sample Description: WS-003 (Surface)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242098
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 12:30 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1703F SDG#: PEM28-13

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	0.0196	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	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 17:51	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242099
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 13:00 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1707F SDG#: PEM28-14

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	0.0068 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0261	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	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 18:03	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)101713 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7242100
LL Group # 1427380
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/17/2013 13:10 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1701F SDG#: PEM28-15

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	0.0159	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	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 18:07	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 06:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Sample Description: **WS-EB-094-101713 Filt Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7242101**
 LL Group # **1427380**
 Account # **14739**

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

Collected: 10/17/2013 13:35 by HVA

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

Submitted: 10/18/2013 09:25

Reported: 10/25/2013 04:46

1794F SDG#: PEM28-16EB*

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	0.00075 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	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132931848002	10/24/2013 18:11	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132945713002	10/22/2013 07:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132931848002	10/21/2013 10:15	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132945713002	10/21/2013 12:50	Damary Valentin	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 10/25/13 at 04:46 AM

Group Number: 1427380

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: 132931848002	Sample number(s): 7242083-7242101								
Arsenic	N.D.	0.0068	0.0200	mg/l	103		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	103		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	102		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	105		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	105		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	98		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	118		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	98		90-110		
Batch number: 132945713002	Sample number(s): 7242083-7242101								
Mercury	N.D.	0.00006	0.00020	mg/l	102		80-120		
		0							

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: 132931848002	Sample number(s): 7242083-7242101 UNSPK: 7242089 BKG: 7242089								
Arsenic	103	103	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	102	103	78-118	1	20	0.0184	0.0180	2 (1)	20
Cadmium	104	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	103	103	76-120	0	20	N.D.	N.D.	0 (1)	20
Lead	103	104	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	104	105	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	100	102	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	116	118	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	99	99	90-117	0	20	N.D.	N.D.	0 (1)	20
Batch number: 132945713002	Sample number(s): 7242083-7242101 UNSPK: 7242089 BKG: 7242089								
Mercury	104	107	80-120	3	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



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1427380

Sample # 7242083-101

Instructions on reverse side correspond with circled numbers.

Pg 1 of 2

1 Client Information				4 Matrix				5 Analyses Requested				SCR#: _____	
Facility #/SID <u>Mayflower Pipeline Incident</u>				Soil <input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Air <input type="checkbox"/>				Preservation Code				Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
Site Address <u>Mayflower, AR</u>								Total # of Containers					
ExxonMobil PM <u>Scott Bushrae</u>		Cost Center/AFE		# N # <u>10Ls 8260B</u> <u>PAH 8270 SIM</u> <u>RCA Metals + Ni, Co, Mg</u> <u>Diss. Metals</u> <u>HEM Oil & Grease</u>									
Consultant/Office <u>ARCADIS</u>													
Consultant PM <u>Stephen Burrick</u>		Consultant Phone # <u>919-302-6799</u>											
Sampler <u>Hans Van Aller / Daniel Mays</u>													
2 Sample Identification		3 Collected		Grab	Composite								
		Date	Time										
<u>WS-014(1.5-2.0)101713</u>		<u>10-17-13</u>	<u>900</u>	<input checked="" type="checkbox"/>									
<u>WS-014(5.5-6.0)101713</u>		<u>10-17-13</u>	<u>910</u>	<input checked="" type="checkbox"/>									
<u>WS-012(1.5-2.0)101713</u>		<u>10-17-13</u>	<u>915</u>	<input checked="" type="checkbox"/>									
<u>WS-012(5.0-5.5)101713</u>		<u>10-17-13</u>	<u>920</u>	<input checked="" type="checkbox"/>									
<u>WS-010(1.5-2.0)101713</u>		<u>10-17-13</u>	<u>930</u>	<input checked="" type="checkbox"/>									
<u>WS-010(3.5-4.0)101713</u>		<u>10-17-13</u>	<u>940</u>	<input checked="" type="checkbox"/>									
<u>WS-006(0.5-1.0)101713</u>		<u>10-17-13</u>	<u>1000</u>	<input checked="" type="checkbox"/>									
<u>WS-005(surface)101713</u>		<u>10-17-13</u>	<u>1050</u>	<input checked="" type="checkbox"/>									
<u>WS-006(0.5-1.0)101713 MS/MSD</u>		<u>10-17-13</u>	<u>1000</u>	<input checked="" type="checkbox"/>									
<u>WS-011(1.5-2.0)101713</u>		<u>10-17-13</u>	<u>1100</u>	<input checked="" type="checkbox"/>									
<u>WS-011(5.0-5.5)101713</u>		<u>10-17-13</u>	<u>1110</u>	<input checked="" type="checkbox"/>									
<u>WS-002(surface)101713</u>		<u>10-17-13</u>	<u>1200</u>	<input checked="" type="checkbox"/>									

7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>Daniel Mays</u>		Date <u>10-17-13</u>	Time <u>1500</u>	Received by	Date	Time	9
Standard <u>5 day</u> 4 day				Relinquished by		Date	Time	Received by	Date	Time	
72 hour 48 hour 24 hour				Relinquished by		Date	Time	Received by	Date	Time	
				Relinquished by Commercial Carrier		Date	Time	Received by	Date	Time	
8 Data Package (circle if required)				UPS <input checked="" type="checkbox"/> FedEx _____ Other _____		Temperature Upon Receipt <u>0.1-1.7 °C</u>		Custody Seals Intact? <u>Yes</u> No			
Type I - Full				EDD (circle if required)		Received by <u>CS</u>		Date <u>10/18/13</u>	Time <u>0925</u>		
Type VI (Raw Data)				Locus EIM (default)							
NJ Reduced				Other _____							
Other _____											

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
 Group # 1427380 Sample # 7242083-101
Instructions on reverse side correspond with circled numbers.

pg 2 of 2

1 Client Information				4 Matrix		5 Analyses Requested										6 Remarks	
Facility #/SID: <u>Mayflower Pipeline Incident</u> Site Address: <u>Mayflower, AR</u> ExxonMobil PM: <u>Scott Bushroe</u> Cost Center/AFE: _____ Consultant/Office: <u>ARCADIS</u> Consultant PM: <u>Stephen Barrick</u> Consultant Phone #: <u>919-302-6799</u> Sampler: <u>Hans Van Alber / Daniel Mays</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> NPDES <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Water <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Air <input type="checkbox"/>		Preservation Code: _____ Total # of Containers: _____ VOCs 8260B PAH 8270 SIM RCRA Metals Ni, V, Cr, Mg Diss. Metals NEM Oil & Grease										SCR#: _____ Preservation Codes: H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
2 Sample Identification				3 Grab Composite												*Lab to filter and pressure diss. metals upon receipt	
		Collected															
		Date	Time	Grab	Composite												
<u>WS-018 (surface)</u>		<u>10-17-13</u>	<u>1220</u>	<input checked="" type="checkbox"/>													
<u>WS-003 (surface)</u>		<u>10-17-13</u>	<u>1230</u>	<input checked="" type="checkbox"/>													
<u>WS-007 (0.5-1.0)</u>		<u>10-17-13</u>	<u>1300</u>	<input checked="" type="checkbox"/>													
<u>WS-001 (0.5-1.0)</u>		<u>10-17-13</u>	<u>1310</u>	<input checked="" type="checkbox"/>													
<u>WS-EB-114-101713</u>		<u>10-17-13</u>	<u>1335</u>	<input checked="" type="checkbox"/>													
<u>WS-TB-179-101713</u>		<u>10-17-13</u>		<input checked="" type="checkbox"/>													
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by: <u>Daniel Mays</u> Date: <u>10-17-13</u> Time: <u>1500</u> Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date: _____ Time: _____ Relinquished by Commercial Carrier: UPS <input checked="" type="checkbox"/> FedEx _____ Other _____ Temperature Upon Receipt: <u>01-1.7</u> °C		Received by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____ Received by: _____ Date: _____ Time: _____ Received by: <u>C. Cash</u> Date: <u>10/18/13</u> Time: <u>0925</u>											
8 Data Package (circle if required)																9	
Type I - Full Type VI (Raw Data) NJ Reduced Other _____		EDD (circle if required) Locus EIM (default) Other _____														Custody Seals Intact? <u>(Yes)</u> No	

Environmental Sample Administration 1427380
Receipt Documentation Log

Client/Project: Mayflower
Date of Receipt: 10/18/13
Time of Receipt: 0925
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	07121	0.7	TB	WI	Y	B	
2		1.7					
3		0.1					
4		0.6					
5		0.1					
6		0.1					

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Cashner 3647 Date/Time: 10/18/13 1023

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

Inorganic Qualifiers

A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq 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.

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