

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: 10/21/2013

Group Number: 1427995

SDG: PEM34

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-014(1.5-2.0)101913 Filt Grab Surface Water	7245582
WS-014(5.5-6.0)101913 Filt Grab Surface Water	7245583
WS-012(1.5-2.0)101913 Filt Grab Surface Water	7245584
WS-012(5.0-5.5)101913 Filt Grab Surface Water	7245585
WS-010(1.5-2.0)101913 Filt Grab Surface Water	7245586
WS-010(3.5-4.0)101913 Filt Grab Surface Water	7245587
WS-006(0.5-1.0)101913 Filt Grab Surface Water	7245588
WS-006(0.5-1.0)101913MS Filt Grab Surface Water	7245589
WS-006(0.5-1.0)101913MSD Filt Grab Surface Water	7245590
WS-006(0.5-1.0)101913DUP Filt Grab Surface Water	7245591
WS-005(Surface)101913 Filt Grab Surface Water	7245592
WS-002(Surface)101913 Filt Grab Surface Water	7245593
WS-011(1.5-2.0)101913 Filt Grab Surface Water	7245594
WS-011(5.0-5.5)101913 Filt Grab Surface Water	7245595
WS-018(Surface)101913 Filt Grab Surface Water	7245596
WS-003(Surface)101913 Filt Grab Surface Water	7245597
WS-007(0.5-1.0)101913 Filt Grab Surface Water	7245598
WS-001(0.5-1.0)101913 Filt Grab Surface Water	7245599
WS-EB-096-101913 Filt Grab Water	7245600

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

COPY TO		
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
COPY TO		
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 #: 1427995

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:**SW-846 6010B, Metals Dissolved**

Batch #: 132961848002 (Sample number(s): 7245582-7245600 UNSPK: 7245588 BKG: 7245588)

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

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

Sample Description: WS-014(1.5-2.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245582
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 09:25 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9141 SDG#: PEM34-01

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	0.0224	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	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:00	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245583
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 09:30 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9145 SDG#: PEM34-02

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	0.0140	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	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:04	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245584
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 09:45 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9121 SDG#: PEM34-03

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	0.0163	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	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:16	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245585
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 09:50 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9125 SDG#: PEM34-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0167	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 6010B						
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
SW-846 7470A						

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	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:20	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245586
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:05 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9101 SDG#: PEM34-05

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	0.0070 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0175	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	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:24	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:10	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245587
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:10 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9103 SDG#: PEM34-06

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	0.0180	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	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:28	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245588
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:20 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9060 SDG#: PEM34-07BKG

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	0.0176	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	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 03:37	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101913MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245589
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:20 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9060 SDG#: PEM34-07MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	7440-38-2	mg/l	mg/l	mg/l	
07046	Barium	7440-39-3	0.155	0.0068	0.0200	1
07049	Cadmium	7440-43-9	2.12	0.00033	0.0050	1
07051	Chromium	7440-47-3	0.0521	0.00076	0.0050	1
07055	Lead	7440-47-3	0.207	0.0016	0.0150	1
07061	Nickel	7439-92-1	0.156	0.0047	0.0150	1
07036	Selenium	7440-02-0	0.530	0.0015	0.0100	1
07066	Silver	7782-49-2	0.154	0.0084	0.0200	1
07071	Vanadium	7440-22-4	0.0621	0.0021	0.0050	1
		7440-62-2	0.494	0.0020	0.0050	1
SW-846 7470A						
00259	Mercury	7439-97-6	mg/l	mg/l	mg/l	
			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	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 03:49	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101913MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245590
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:20 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9060 SDG#: PEM34-07MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	7440-38-2	mg/l	mg/l	mg/l	
07046	Barium	7440-39-3	0.159	0.0068	0.0200	1
07049	Cadmium	7440-43-9	2.13	0.00033	0.0050	1
07051	Chromium	7440-47-3	0.0528	0.00076	0.0050	1
07055	Lead	7439-92-1	0.208	0.0016	0.0150	1
07061	Nickel	7440-02-0	0.158	0.0047	0.0150	1
07036	Selenium	7440-02-0	0.536	0.0015	0.0100	1
07066	Silver	7782-49-2	0.155	0.0084	0.0200	1
07071	Vanadium	7440-22-4	0.0611	0.0021	0.0050	1
		7440-62-2	0.500	0.0020	0.0050	1
SW-846 7470A						
00259	Mercury	7439-97-6	mg/l	mg/l	mg/l	
			0.00099	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	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 03:53	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101913DUP Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245591
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 10:20 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9060 SDG#: PEM34-07DUP

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	0.0070 J	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	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 03:45	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245592
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 09:00 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F905S SDG#: PEM34-08

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	0.0249	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	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:32	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245593
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 11:00 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F902S SDG#: PEM34-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
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 6010B						
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
SW-846 7470A						

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	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:36	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245594
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 11:15 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9111 SDG#: PEM34-10

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	0.0193	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	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:40	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245595
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 11:20 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9115 SDG#: PEM34-11

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	0.0200	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	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:44	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245596
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 08:15 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F918S SDG#: PEM34-12

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	0.0070 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0249	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	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:48	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245597
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 08:25 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F903S SDG#: PEM34-13

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	0.0198	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	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 04:52	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245598
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 08:35 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9070 SDG#: PEM34-14

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	0.0244	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	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 05:04	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)101913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245599
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 08:45 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

F9010 SDG#: PEM34-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
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 6010B						
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
SW-846 7470A						

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	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 05:08	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Sample Description: WS-EB-096-101913 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7245600
LL Group # 1427995
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/19/2013 12:00 by HVA

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

Submitted: 10/21/2013 17:35

Reported: 10/25/2013 07:09

FEB96 SDG#: PEM34-16EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	N.D.	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 6010B						
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1
SW-846 7470A						

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	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132961848002	10/25/2013 05:12	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132965713003	10/24/2013 06:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132961848002	10/24/2013 08:22	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132965713003	10/23/2013 17:35	Nelli S Markaryan	1

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

Quality Control SummaryClient Name: ExxonMobil c/o Arcadis
Reported: 10/25/13 at 07:09 AM

Group Number: 1427995

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: 132961848002	Sample number(s): 7245582-7245600								
Arsenic	N.D.	0.0068	0.0200	mg/l	103		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	105		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	104		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	105		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	124*		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	99		90-110		
Batch number: 132965713003	Sample number(s): 7245582-7245600								
Mercury	N.D.	0.00006	0.00020	mg/l	104		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: 132961848002	Sample number(s): 7245582-7245600 UNSPK: 7245588 BKG: 7245588								
Arsenic	104	106	81-123	2	20	N.D.	0.0070 J	200* (1)	20
Barium	105	106	78-118	1	20	0.0176	0.0174	1 (1)	20
Cadmium	104	106	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	104	104	76-120	0	20	N.D.	N.D.	0 (1)	20
Lead	104	105	75-125	2	20	N.D.	N.D.	0 (1)	20
Nickel	106	107	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	103	103	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	124	122	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	99	100	90-117	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132965713003	Sample number(s): 7245582-7245600 UNSPK: 7245588 BKG: 7245588								
Mercury	101	99	80-120	2	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.



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1427995 Sample # 7245582-600
Instructions on reverse side correspond with circled numbers.

ExxonMobil Analysis Request/Chain of Custody

pg 1/3

1 Client Information				4 Matrix		5 Analyses Requested										6 Remarks						
Facility #/SID Mayflower Pipeline Incident				Sediment ☐ Ground ☐ Surface ☒ Potable ☐ NPDES ☐ Air ☐ Oil ☐ Total # of Containers		Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other						
Site Address Mayflower, AR																						
ExxonMobil PM Scott Bushroe		Cost Center/AFE														Lab to filter and pressure diss. metals upon receipt.						
Consultant/Office ARCADIS																						
Consultant PM Stephen Barrick		Consultant Phone # 919-302-6799																				
Sampler Hans Van Ather / Danny Mays																						
2 Sample Identification			3 Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers	Analyses Requested											
			Date	Time																		
WS-014 (1.5-2.0) 10/19/13			10-19-13	925	X						9	X	X	X	X	X	X	X	X	X	X	
WS-014 (5.5-6.0) 10/19/13			10-19-13	930	X						9	X	X	X	X	X	X	X	X	X	X	
WS-012 (1.5-2.0) 10/19/13			10-19-13	945	X						9	X	X	X	X	X	X	X	X	X	X	
WS-012 (5.0-5.5) 10/19/13			10-19-13	950	X						9	X	X	X	X	X	X	X	X	X	X	
WS-010 (1.5-2.0) 10/19/13			10-19-13	1005	X						9	X	X	X	X	X	X	X	X	X	X	
WS-010 (3.5-4.0) 10/19/13			10-19-13	1010	X						9	X	X	X	X	X	X	X	X	X	X	
WS-006 (0.5-1.0) 10/19/13			10-19-13	1020	X						9	X	X	X	X	X	X	X	X	X	X	
WS-006 (0.5-1.0) 10/19/13 MS/MSD			10-19-13	1020	X						18	X	X	X	X	X	X	X	X	X	X	
WS-005 (surface) 10/19/13			10-19-13	900	X						9	X	X	X	X	X	X	X	X	X	X	
WS-002 (surface) 10/19/13			10-19-13	1100	X						9	X	X	X	X	X	X	X	X	X	X	
WS-011 (1.5-2.0) 10/19/13			10-19-13	1115	X						9	X	X	X	X	X	X	X	X	X	X	
WS-011 (5.0-5.5) 10/19/13			10-19-13	1120	X						9	X	X	X	X	X	X	X	X	X	X	

7 Turnaround Time Requested (TAT) (please circle)			Relinquished by Daniel Mays Paul Mays		Date 10-20-13	Time 1600	Received by		Date	Time
Standard 5 day 4 day			Relinquished by		Date	Time	Received by		Date	Time
72 hour 48 hour 24 hour			Relinquished by		Date	Time	Received by		Date	Time
8 Data Package (circle if required)			Relinquished by Commercial Carrier		Date	Time	Received by		Date	Time
Type I - Full			UPS FedEx Other X				Annelise H. Owen		10/21/13	1735
Type VI (Raw Data)			Temperature Upon Receipt 0.2-2.4 °C				Custody Seals Intact?		Yes	No
NJ Reduced										
Other										



ExxonMobil Analysis Request/Chain of Custody

Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1427995 Sample # 1245582-600

Pg 2/3

1 Client Information				4 Matrix		5 Analyses Requested										6 Remarks	
Facility #/SID				Soil		Preservation Code										Preservation Codes	
Site Address				Ground												H = HCl T = Thiosulfate	
ExxonMobil PM				Surface												N = HNO ₃ B = NaOH	
Cost Center/AFE				NPDES												S = H ₂ SO ₄ O = Other	
Consultant/Office				Air												7	
Consultant PM				Oil												8	
Consultant Phone #				Total # of Containers												9	
Sampler																	
Mayflower Pipeline Incident																	
Mayflower, AR																	
Scott Bushroe																	
ARCADIS																	
Stephen Barrick																	
919-302-6799																	
Hans Van Aller / Danny Mays																	
2 Sample Identification				3 Collected													
Date				Time													
WS-018(surface) 10/19/13				815													
WS-003(surface) 10/19/13				825													
WS-007(0.5-1.0) 10/19/13				835													
WS-001(0.5-1.0) 10/19/13				845													
WS-EB-046-10/19/13				1200													
WS-TB-181-10/20/13																	
WS-018(surface) 10/20/13				805													
WS-003(surface) 10/20/13				815													
WS-007(0.5-1.0) 10/20/13				835													
WS-001(0.5-1.0) 10/20/13				850													
WS-005(surface) 10/20/13				910													
WS-014(1.5-2.0) 10/20/13				1000													
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date		Time		Received by		Date		Time			
Standard 5 day 4 day				Daniel Mays Paul Mays		10-20-13		1600									
72 hour 48 hour 24 hour				Relinquished by		Date		Time		Received by		Date		Time			
				Relinquished by		Date		Time		Received by		Date		Time			
8 Data Package (circle if required)				Relinquished by Commercial Carrier		Date		Time		Received by		Date		Time			
Type I - Full				UPS FedEx Other X						Anneline H. Owen		10/21/13		1735			
Type VI (Raw Data)																	
NJ Reduced																	
Other																	
EDD (circle if required)				Temperature Upon Receipt		0.2-2.4 °C				Custody Seals Intact?		Yes No					
Locus EIM (default)																	
Other																	

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

Environmental Sample Administration
Receipt Documentation Log

1427995

Client/Project: Exxon Mobil: MayflowerShipping Container Sealed: YES NODate of Receipt: 10/21/13Custody Seal Present *: YES NOTime of Receipt: 1735* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 01Package: 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	DT131	1.8	TB	WI	Y	B	
2	↓	1.9	↓	↓	↓	↓	
3	↓	0.7	↓	↓	↓	↓	
4	↓	2.4	↓	↓	↓	↓	
5	↓	6.3	↓	↓	↓	↓	
6	↓	2.1	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Anne H. Owen / 210 Date/Time: 10/21/13 1750

Environmental Sample Administration
Receipt Documentation Log

1427995

Client/Project: Exxon Mobil: MayflowerShipping Container Sealed: YES NODate of Receipt: 10/21/13Custody Seal Present *: YES NOTime of Receipt: 1735* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 01Package: 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
7A	DT121	0.6	TB	WI	Y	B	
8A		0.3					
9A		0.2					
10A		0.6					
11A		1.1					
12A		0.4					

APD 10/21/13

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Anneliese H. Owens / 210 Date/Time: 10/21/13 1750

Issued by Dept. 6042 Management

2174.06

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 <u>limit of quantitation</u> , 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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