

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

August 26, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 08/21/2013

Group Number: 1413018

SDG: PEK90

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-014(1.5-2.0)082013 Filt Grab Surface Water	7168661
WS-014(5.5-6.0)082013 Filt Grab Surface Water	7168662
WS-012(1.5-2.0)082013 Filt Grab Surface Water	7168663
WS-012(5.0-5.5)082013 Filt Grab Surface Water	7168664
WS-010(1.5-2.0)082013 Filt Grab Surface Water	7168665
WS-010(3.5-4.0)082013 Filt Grab Surface Water	7168666
WS-006(0.5-1.0)082013 Filt Grab Surface Water	7168667
WS-006(0.5-1.0)082013MS Filt Grab Surface Water	7168668
WS-006(0.5-1.0)082013MSD Filt Grab Surface Water	7168669
WS-006(0.5-1.0)082013DUP Filt Grab Surface Water	7168670
WS-005(Surface)082013 Filt Grab Surface Water	7168671
WS-002(Surface)082013 Filt Grab Surface Water	7168672
WS-018(Surface)082013 Filt Grab Surface Water	7168673
WS-011(1.5-2.0)082013 Filt Grab Surface Water	7168674
WS-011(5.0-5.5)082013 Filt Grab Surface Water	7168675
WS-003(Surface)082013 Filt Grab Surface Water	7168676
WS-007(0.5-1.0)082013 Filt Grab Surface Water	7168677
WS-001(0.5-1.0)082013 Filt Grab Surface Water	7168678
WS-EB-036-082013 Filt Grab Water	7168679

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

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1413018

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 #: 132331848006 (Sample number(s): 7168661-7168679 UNSPK: 7168667 BKG: 7168667)

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

Sample Description: WS-014(1.5-2.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168661
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 09:00 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2014F SDG#: PEK90-01

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	0.0119	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	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:50	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168662
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 09:10 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

20F14 SDG#: PEK90-02

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	0.0201	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	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:54	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168663
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 09:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2012F SDG#: PEK90-03

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	0.0143	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	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:06	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168664
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 09:40 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

20F12 SDG#: PEK90-04

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	0.0172	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	0.0018 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:10	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168665
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 10:00 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2010F SDG#: PEK90-05

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	0.0137	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	0.0017 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:14	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168666
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

20F10 SDG#: PEK90-06

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	0.0193	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	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:18	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168667
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 10:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2006F SDG#: PEK90-07BKG

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	0.0109	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:26	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 09:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082013MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168668
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 10:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2006F SDG#: PEK90-07MS

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	0.157	0.0068	0.0200	1
07046	Barium	7440-39-3	2.06	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0522	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.158	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.528	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.155	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0459	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.515	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00096	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	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082013MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168669
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 10:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2006F SDG#: PEK90-07MSD

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	0.156	0.0068	0.0200	1
07046	Barium	7440-39-3	2.04	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0519	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.157	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.528	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.155	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0462	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.511	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00093	0.000060	0.00020	1

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	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:42	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)082013DUP Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168670
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 10:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2006F SDG#: PEK90-07DUP

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	0.0106	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	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 11:34	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168671
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 11:10 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2005F SDG#: PEK90-08

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	0.0173	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	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:22	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168672
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 11:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2002F SDG#: PEK90-09

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	0.0229	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	0.0016 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:26	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168673
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 11:45 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2018F SDG#: PEK90-10

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	0.0212	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	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:30	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168674
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 12:00 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2011F SDG#: PEK90-11

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	0.0093	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	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:34	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168675
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 12:10 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

20F11 SDG#: PEK90-12

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	0.0172	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	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:38	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168676
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 12:30 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2003F SDG#: PEK90-13

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	0.0078	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	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:42	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168677
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 12:45 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2007F SDG#: PEK90-14

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	0.0174	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	0.0023 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

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	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:54	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)082013 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168678
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 13:00 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

2001F SDG#: PEK90-15

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	0.0086	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	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 12:58	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-EB-036-082013 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7168679
LL Group # 1413018
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/20/2013 14:00 by HVA

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

Submitted: 08/21/2013 09:20

Reported: 08/26/2013 15:01

20EBF SDG#: PEK90-16EB*

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	0.00065 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	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07049	Cadmium	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	132331848006	08/26/2013 13:02	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	132345713003	08/24/2013 10:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132331848006	08/22/2013 11:21	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132345713003	08/23/2013 15:10	Nelli S Markaryan	1

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

Quality Control SummaryClient Name: ExxonMobil c/o Arcadis
Reported: 08/26/13 at 03:01 PM

Group Number: 1413018

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: 132331848006	Sample number(s): 7168661-7168679								
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	102		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	100		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	104		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	90		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	100		90-110		
Batch number: 132345713003	Sample number(s): 7168661-7168679								
Mercury	N.D.	0.00006	0.00020	mg/l	97		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: 132331848006	Sample number(s): 7168661-7168679 UNSPK: 7168667 BKG: 7168667								
Arsenic	105	104	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	102	101	78-118	1	20	0.0109	0.0106	3 (1)	20
Cadmium	104	104	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	102	101	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	105	105	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	105	105	86-115	0	20	0.0016 J	N.D.	200* (1)	20
Selenium	103	104	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	92	92	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	103	102	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132345713003	Sample number(s): 7168661-7168679 UNSPK: 7168667 BKG: 7168667								
Mercury	96	93	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 # 1413018 Sample # 7168661-79
Instructions on reverse side correspond with circled numbers.

ps. 1 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 Bushroo</u> Consultant/Office <u>ArcoDis</u> Consultant PM <u>Steve Barrick</u> Consultant Phone # <u>919-302-6799</u> Sampler <u>H. Van Allen / T. Milburn</u>				Sediment ☐ Ground ☐ Surface ☒ Potable ☐ NPDES ☐ Air ☐ Soil ☐ Water ☐ Oil ☐		Preservation Code <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>H</td><td>N</td><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>VOLs 8260B</td><td>PAH 8270 SIM</td><td>RLRA Metals + Ni, V, Cr, Mn</td><td>Diss. Metals</td><td>HEM Oil & Grease</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										H	N	H										VOLs 8260B	PAH 8270 SIM	RLRA Metals + Ni, V, Cr, Mn	Diss. Metals	HEM Oil & Grease								SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
H	N	H																																							
VOLs 8260B	PAH 8270 SIM	RLRA Metals + Ni, V, Cr, Mn	Diss. Metals	HEM Oil & Grease																																					
2 Sample Identification				3 Grab Composite																																					
		Collected																																							
		Date	Time																																						
WS-014(1.5-2.0)082013		8/20/13	900	✓																																					
WS-014(5.5-6.0)082013			910	✓																																					
WS-012(1.5-2.0)082013			930	✓																																					
WS-012(5.0-5.5)082013			940	✓																																					
WS-010(1.5-2.0)082013			1000	✓																																					
WS-010(3.5-4.0)082013			1010	✓																																					
WS-006(0.5-1.0)082013			1030	✓																																					
WS-005(Surface)082013			1110	✓																																					
WS-006(0.5-1.0)082013			1030	✓												MS/MSD																									
WS-002(Surface)082013			1130	✓																																					
WS-018(Surface)082013			1145	✓																																					
WS-011(1.5-2.0)082013			1200	✓																																					
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date		Time		Received by		Date		Time																											
Standard <u>5 day</u> 4 day 72 hour 48 hour 24 hour				<u>D. Milburn</u> Relinquished by		<u>8/20/13</u> Date		<u>1500</u> Time		Received by		Date		Time																											
				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 Type VI (Raw Data) NJ Reduced Other _____				EDD (circle if required) Locus EIM (default) Other _____		UPS ☒ FedEx _____ Other _____		Temperature Upon Receipt <u>0.3-4.3</u> °C		Custody Seals Intact? <u>(Yes)</u> No		Date <u>8/21/13</u> Time <u>0920</u>																													

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

For Eurofins Lancaster Laboratories Environmental use only
Acct. # 14739 Group # 1413018 Sample # 7168661-79
Instructions on reverse side correspond with circled numbers.

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

7053 0713

Environmental Sample Administration
Receipt Documentation Log1413017 PUK
8/21/13
1413018Client/Project: Mayflower WaterShipping Container Sealed: (YES) NODate of Receipt: 8/21/13Custody Seal Present *: (YES) NOTime of Receipt: 0920* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 60-1Package: (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	DT146	4.3	TB	WI	Y	B	
2		1.3					
3		0.3					
4		2.2					
5		3.9					
6		0.8					

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

Paperwork Discrepancy/Unpacking Problems:

Gr. 141 2689 Received WS-002 (surface) 081913 8/19/13 @ 1030 - 15 bottle
Gr. 141 2681 Received WS-003 (surface) 081913 8/19/13 @ 1130 - 08 bottle.

Unpacker Signature/Emp#: Cash 3647 Date/Time: 8/21/13 1045

Issued by Dept. 6042 Management

2174.06

Environmental Sample Administration
Receipt Documentation Log

1413018

Client/Project: Mayflower WaterShipping Container Sealed: YES NODate of Receipt: 8/21/13Custody Seal Present *: YES NOTime of Receipt: 0920* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 62-1Package: 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	DT146	0.3	TB	WI	Y	B	
2							
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: CEH 3647 Date/Time: 8/21/13 1045

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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