

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 18, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/12/2013

Group Number: 1425935

SDG: PEM10

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-014(1.5-2.0)101113 Filt Grab Surface Water	7234581
WS-014(5.5-6.0)101113 Filt Grab Surface Water	7234582
WS-012(1.5-2.0)101113 Filt Grab Surface Water	7234583
WS-012(5.0-5.5)101113 Filt Grab Surface Water	7234584
WS-010(1.5-2.0)101113 Filt Grab Surface Water	7234585
WS-010(3.5-4.0)101113 Filt Grab Surface Water	7234586
WS-006(0.5-1.0)101113 Filt Grab Surface Water	7234587
WS-006(0.5-1.0)101113MS Filt Grab Surface Water	7234588
WS-006(0.5-1.0)101113MSD Filt Grab Surface Water	7234589
WS-006(0.5-1.0)101113DUP Filt Grab Surface Water	7234590
WS-005(Surface)101113 Filt Grab Surface Water	7234591
WS-011(1.5-2.0)101113 Filt Grab Surface Water	7234592
WS-011(5.0-5.5)101113 Filt Grab Surface Water	7234593
WS-002(Surface)101113 Filt Grab Surface Water	7234594
WS-018(Surface)101113 Filt Grab Surface Water	7234595
WS-003(Surface)101113 Filt Grab Surface Water	7234596
WS-007(0.5-1.0)101113 Filt Grab Surface Water	7234597
WS-001(0.5-1.0)101113 Filt Grab Surface Water	7234598
WS-EB-88-101113 Filt Grab Water	7234599

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

Attn: Michael J. Firth

COPY TO		
ELECTRONIC	ARCADIS	Attn: Emily Leamer
COPY TO		
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 #: 1425935

General Comments:

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

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

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: WS-014(1.5-2.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234581
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 08:50 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1001 SDG#: PEM10-01

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	0.0199	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	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:50	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234582
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 09:00 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1002 SDG#: PEM10-02

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	0.0198	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	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:54	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:46	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234583
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 09:10 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1003 SDG#: PEM10-03

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	0.0173	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	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	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:06	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:48	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234584
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 09:20 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1004 SDG#: PEM10-04

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	0.0175	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 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	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:10	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:50	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234585
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 09:40 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1005 SDG#: PEM10-05

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	0.0200	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	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:14	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234586
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 09:50 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1006 SDG#: PEM10-06

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	0.0211	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	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:18	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 06:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234587
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1007 SDG#: PEM10-07BKG

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	0.0177	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
SW-846 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	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:26	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101113MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234588
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1007 SDG#: PEM10-07MS

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	0.159	0.0068	0.0200	1
07049	Cadmium	7440-43-9	2.07	0.00033	0.0050	1
07051	Chromium	7440-47-3	0.0514	0.00076	0.0050	1
07055	Lead	7439-92-1	0.207	0.0016	0.0150	1
07061	Nickel	7440-02-0	0.160	0.0047	0.0150	1
07036	Selenium	7440-02-0	0.528	0.0015	0.0100	1
07066	Silver	7782-49-2	0.152	0.0084	0.0200	1
07071	Vanadium	7440-22-4	0.0450	0.0021	0.0050	1
		7440-62-2	0.527	0.0020	0.0050	1
SW-846 7470A						
00259	Mercury	7439-97-6	mg/l	mg/l	mg/l	
			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	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:38	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101113MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234589
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1007 SDG#: PEM10-07MSD

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	0.161	0.0068	0.0200	1
07046	Barium	7440-39-3	2.01	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0528	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.164	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.544	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.157	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0442	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.514	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	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:42	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:06	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)101113DUP Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234590
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1007 SDG#: PEM10-07DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0180	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 00:34	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234591
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 10:30 by HVA

ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 10/12/2013 09:45

Highlands Ranch CO 80129

Reported: 10/18/2013 10:01

P1008 SDG#: PEM10-08

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	0.0146	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	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:22	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234592
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1009 SDG#: PEM10-09

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	0.0198	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	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:27	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:10	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234593
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1010 SDG#: PEM10-10

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	0.0229	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	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	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:31	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234594
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1011 SDG#: PEM10-11

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	0.0184	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.0015 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	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:35	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:14	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234595
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 11:40 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1012 SDG#: PEM10-12

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	SW-846 6010B 7440-38-2	mg/l N.D.	mg/l 0.0068	mg/l 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						
00259	Mercury	7439-97-6	mg/l N.D.	mg/l 0.000060	mg/l 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	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:39	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234596
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 11:50 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1013 SDG#: PEM10-13

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	0.0209	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	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:43	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234597
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 12:10 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1014 SDG#: PEM10-14

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	0.0268	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	0.0022 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	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:55	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)101113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234598
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 12:30 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1015 SDG#: PEM10-15

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	0.0191	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	0.0022 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 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	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 01:58	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Sample Description: WS-EB-88-101113 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7234599
LL Group # 1425935
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/11/2013 13:00 by HVA

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

Submitted: 10/12/2013 09:45

Reported: 10/18/2013 10:01

P1016 SDG#: PEM10-16EB*

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	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 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	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132871848007	10/18/2013 02:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132875713002	10/16/2013 07:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132871848007	10/15/2013 07:03	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132875713002	10/15/2013 15:20	Nelli S Markaryan	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 10/18/13 at 10:01 AM

Group Number: 1425935

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: 132871848007	Sample number(s): 7234581-7234599								
Arsenic	N.D.	0.0068	0.0200	mg/l	100		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	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	108		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	105		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	88		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	102		90-110		
Batch number: 132875713002	Sample number(s): 7234581-7234599								
Mercury	N.D.	0.00006	0.00020	mg/l	99		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: 132871848007	Sample number(s): 7234581-7234599 UNSPK: 7234587 BKG: 7234587								
Arsenic	106	107	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	103	100	78-118	3	20	0.0177	0.0180	1 (1)	20
Cadmium	103	106	83-116	3	20	N.D.	N.D.	0 (1)	20
Chromium	103	102	76-120	2	20	N.D.	N.D.	0 (1)	20
Lead	107	109	75-125	2	20	N.D.	N.D.	0 (1)	20
Nickel	106	109	86-115	3	20	N.D.	N.D.	0 (1)	20
Selenium	101	105	75-125	4	20	N.D.	N.D.	0 (1)	20
Silver	90	88	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	105	103	90-117	3	20	N.D.	N.D.	0 (1)	20
Batch number: 132875713002	Sample number(s): 7234581-7234599 UNSPK: 7234587 BKG: 7234587								
Mercury	96	96	80-120	1	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.



ExxonMobil Analysis Request/Chain of Custody

Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1425935 Sample # 7234581-99
Instructions on reverse side correspond with circled numbers.

1 of 2

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks	
Facility #/SID <u>Manyflower Pipeline Incident</u>				☐ Sediment ☐ Ground ☒ Surface ☐ Potable ☐ NPDES ☐ Air ☐ Soil ☐ Water ☐ Oil				Preservation Code												SCR#: _____	
Site Address <u>Manyflower, AR</u>								4 N W												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
ExxonMobil PM <u>Scott Bushroe</u>				Cost Center/AFE				VOC 8260B PAHs 8270.51M RCRA Metals ^{hardness} <u>1.1 Ca, 10.9</u> Diss Metals HEM Oil & Grease												Lab to filter & preserve diss. metals upon receipt	
Consultant/Office <u>Arcadis</u>				Consultant Phone # <u>919 302 6799</u>																	
Consultant PM <u>Steve Barrick</u>				Total # of Containers				MS/MSD													
Sampler <u>Hans Van Aker / Ryan Lewis</u>																					
2 Sample Identification		3 Collected		Grab		Composite															
Date	Time																				
WS-014(1.5-2.0) 10/11/13	850	X																			
WS-014(5.5-6.0) 10/11/13	900	X																			
WS-012(1.5-2.0) 10/11/13	910	X																			
WS-012(5.0-5.5) 10/11/13	920	X																			
WS-010(1.5-2.0) 10/11/13	940	X																			
WS-010(3.5-4.0) 10/11/13	950	X																			
WS-006(0.5-1.0) 10/11/13	1000	X																			
WS-006(0.5-1.0) 10/11/13 MS/MSD	1000	X																			
WS-005 (Surface) 10/11/13	1030	X																			
WS-011(1.5-2.0) 10/11/13	1100	X																			
WS-011(5.0-5.5) 10/11/13	1110	X																			
WS-002 (Surface) 10/11/13	1120	X																			

7 Turnaround Time Requested (TAT) (please circle)				Relinquished by		Date		Time		Received by		Date		Time	
Standard <u>(5 day)</u> 4 day				<u>Hans Van Aker</u>		<u>10/11/13</u>		<u>1500</u>							
72 hour 48 hour 24 hour															

8 Data Package (circle if required)		EDD (circle if required)		Relinquished by Commercial Carrier		Received by		Date		Time	
Type I - Full	Type VI (Raw Data)	Locus EIM (default)	Other	UPS <u>X</u> FedEx Other		<u>32</u>		<u>10/12/13</u>		<u>945</u>	
NJ Reduced				Temperature Upon Receipt <u>0.7-1.8</u> °C		Custody Seals Intact? <u>(Yes)</u> No					
Other											

eurofins

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1425935 Sample # 7234581-99
Instructions on reverse side correspond with circled numbers.

Instructions on reverse side correspond with circled numbers

2 of 2

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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 LogClient/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 10/12/13Custody Seal Present *: YES NOTime of Receipt: 945* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: EC-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	BT121	0.4	TB	WI	Y	B	
2		0.7					
3		2.5					
4		1.8					
5		1.5					
6		1.4					

Number of Trip Blanks received NOT listed on chain of custody: 2

Paperwork Discrepancy/Unpacking Problems:

1 jar of EAZ-Dup-02 received unlabeled
received 2 Hcl tripblanks labeled SO-RO-WC-7AS TB 10/11/13 10/11/13 1330

Unpacker Signature/Emp#:

2308

Date/Time:

10/12/13

1103

Issued by Dept. 6042 Management

2174.06

Environmental Sample Administration
Receipt Documentation Log

G#1425935

Client/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 10/12/13Custody Seal Present * : YES NOTime of Receipt: 945* 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
<u>17</u>	<u>DT121</u>	<u>1.7</u>	<u>TB</u>	<u>WI</u>	<u>Y</u>	<u>B</u>	
<u>28</u>	<u>↓</u>	<u>1.2</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	
<u>39</u>	<u>↓</u>	<u>0.7</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	
<u>4</u>							
<u>5</u>							
<u>6</u>							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: [Signature] 2308 Date/Time: 10/12/13 1103

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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