

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 08, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/02/2013

Group Number: 1423111

SDG: PEL87

PO Number: B0086003.1301

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-014(1.5-2.0)100113 Filt Grab Surface Water	7220711
WS-014(5.5-6.0)100113 Filt Grab Surface Water	7220712
WS-012(1.5-2.0)100113 Filt Grab Surface Water	7220713
WS-012(5.0-5.5)100113 Filt Grab Surface Water	7220714
WS-010(1.5-2.0)100113 Filt Grab Surface Water	7220715
WS-010(3.5-4.0)100113 Filt Grab Surface Water	7220716
WS-006(0.5-1.0)100113 Filt Grab Surface Water	7220717
WS-006(0.5-1.0)100113MS Filt Grab Surface Water	7220718
WS-006(0.5-1.0)100113MSD Filt Grab Surface Water	7220719
WS-006(0.5-1.0)100113DUP Filt Grab Surface Water	7220720
WS-005(Surface)100113 Filt Grab Surface Water	7220721
WS-002(Surface)100113 Filt Grab Surface Water	7220722
WS-011(1.5-2.0)100113 Filt Grab Surface Water	7220723
WS-011(5.0-5.5)100113 Filt Grab Surface Water	7220724
WS-018(Surface)100113 Filt Grab Surface Water	7220725
WS-003(Surface)100113 Filt Grab Surface Water	7220726
WS-007(0.5-1.0)100113 Filt Grab Surface Water	7220727
WS-001(0.5-1.0)100113 Filt Grab Surface Water	7220728
WS-EB-78-100113 Filt Grab Water	7220729

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

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

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ELECTRONIC	ARCADIS	Attn: 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 #: 1423111

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)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220711
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 08:30 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0114F SDG#: PEL87-01

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	0.0217	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	132751848002	10/08/2013 09:33	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:33	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-014(5.5-6.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220712
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 08:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

01F14 SDG#: PEL87-02

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	0.0215	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	132751848002	10/08/2013 09:37	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:37	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:11	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-012(1.5-2.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220713
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 08:50 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0112F SDG#: PEL87-03

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	0.0071 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0175	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:49	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:13	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220714
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:00 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

01F12 SDG#: PEL87-04

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	0.0072 J	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	132751848002	10/08/2013 09:53	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:53	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220715
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:20 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0110F SDG#: PEL87-05

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	0.0205	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	132751848002	10/08/2013 09:57	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:57	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-010(3.5-4.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220716
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:30 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

01F10 SDG#: PEL87-06

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	0.0203	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	132751848002	10/08/2013 10:01	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:01	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-006(0.5-1.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220717
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0106F SDG#: PEL87-07BKG

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	0.0309	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	132751848002	10/08/2013 09:09	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:09	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)100113MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220718
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0106F SDG#: PEL87-07MS

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	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.09	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0521	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.209	0.0016	0.0150	1
07055	Lead	7439-92-1	0.161	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.526	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.158	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0472	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.520	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	132751848002	10/08/2013 09:21	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:21	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)100113MSD Filtr Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220719
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0106F SDG#: PEL87-07MSD

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	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.12	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0519	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.206	0.0016	0.0150	1
07055	Lead	7439-92-1	0.159	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.522	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.159	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0462	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.518	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	132751848002	10/08/2013 09:25	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:25	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)100113DUP Filtr Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220720
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 09:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0106F SDG#: PEL87-07DUP

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	0.0308	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	132751848002	10/08/2013 09:17	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 09:17	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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

Sample Description: WS-005(Surface)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220721
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 10:20 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0105F SDG#: PEL87-08

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	0.0086 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0363	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	132751848002	10/08/2013 10:05	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:05	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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

Sample Description: WS-002 (Surface)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220722
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 11:20 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0102F SDG#: PEL87-09

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	0.0075 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0202	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:09	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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

Sample Description: WS-011(1.5-2.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220723
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 10:50 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0111F SDG#: PEL87-10

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	0.0196	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:13	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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

Sample Description: WS-011(5.0-5.5)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220724
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 11:00 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

01F11 SDG#: PEL87-11

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	0.0207	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	132751848002	10/08/2013 10:17	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:17	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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

Sample Description: WS-018 (Surface)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220725
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 11:40 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0118F SDG#: PEL87-12

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	0.0409	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	132751848002	10/08/2013 10:21	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:21	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-003 (Surface)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220726
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 11:50 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0103F SDG#: PEL87-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0219	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	132751848002	10/08/2013 10:25	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:25	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:52	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-007(0.5-1.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220727
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 12:00 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0107F SDG#: PEL87-14

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	0.0220	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	0.0020 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	132751848002	10/08/2013 10:37	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:37	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:54	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

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Sample Description: WS-001(0.5-1.0)100113 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7220728
LL Group # 1423111
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/01/2013 12:10 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0101F SDG#: PEL87-15

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	0.0322	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	132751848002	10/08/2013 10:41	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:41	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:56	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	Nelli S Markaryan	1

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

Sample Description: **WS-EB-78-100113 Filt Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7220729**
 LL Group # **1423111**
 Account # **14739**

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

Collected: 10/01/2013 13:00 by DD

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

Submitted: 10/02/2013 10:10

Reported: 10/08/2013 12:23

0178F SDG#: PEL87-16EB*

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	132751848002	10/08/2013 10:45	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132751848002	10/08/2013 10:45	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132755713004	10/04/2013 09:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132751848002	10/03/2013 08:06	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132755713004	10/03/2013 16:25	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: 10/08/13 at 12:23 PM

Group Number: 1423111

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: 132751848002	Sample number(s): 7220711-7220729								
Arsenic	N.D.	0.0068	0.0200	mg/l	104		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	104		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	105		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	104		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	110		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	107		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	106		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	94		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	104		90-110		
Batch number: 132755713004	Sample number(s): 7220711-7220729								
Mercury	N.D.	0.00006	0.00020	mg/l	95		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: 132751848002	Sample number(s): 7220711-7220729 UNSPK: 7220717 BKG: 7220717								
Arsenic	106	105	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	103	104	78-118	1	20	0.0309	0.0308	1	20
Cadmium	104	104	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	104	103	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	107	106	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	105	104	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	105	106	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	94	92	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	104	104	90-117	0	20	N.D.	N.D.	0 (1)	20
Batch number: 132755713004	Sample number(s): 7220711-7220729 UNSPK: 7220717 BKG: 7220717								
Mercury	96	96	80-120	0	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 # 142311 Sample # 7220711-29
Instructions on reverse side correspond with circled numbers.

1 of 2

1 Client Information				4 Matrix			5 Analyses Requested							6 Remarks			
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				Sediment <input type="checkbox"/>	Potable <input type="checkbox"/>	Ground <input type="checkbox"/>	Oil <input type="checkbox"/>	Total # of Containers	Preservation Code							SCR#: _____ Preservation Codes H = HCl = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
Site Address <u>MAYFLOWER AR</u>									Surface <input checked="" type="checkbox"/>	Air <input type="checkbox"/>	N	H	N				
ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		Soil <input type="checkbox"/>	Water				VOCs 8260B	PAH 8270 SIM	PCRA Metals + Ni, Co, V, Mg	Diss Metals	HEM Oil and Grease	6 LAB TO FILTER AND PRESERVE DISS. METALS UPON RECEIPT			
Consultant/Office <u>ARCADIS</u>				Water													
Consultant PM <u>Steve Barrick</u>		Consultant Phone # <u>919-302-6799</u>		NPDES <input type="checkbox"/>													
Sampler <u>DAVID DROST / HANS VAN ALLEG</u>				Air													
2 Sample Identification		3 Collected		Grab	Composite												
		Date	Time														
<u>WS-014 (1.5-2.0) 100113</u>		<u>10.01.13</u>	<u>830</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-014 (5.5-6.0) 100113</u>			<u>840</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-012 (1.5-2.0) 100113</u>			<u>850</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-012 (5.0-5.5) 100113</u>			<u>900</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-010 (1.5-2.0) 100113</u>			<u>920</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-018 (3.5-4.0) 100113</u>			<u>930</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-006 (0.5-1.0) 100113</u>			<u>940</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-005 (Surface) 100113</u>			<u>1020</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-002 (Surface) 100113</u>			<u>1120</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-011 (1.5-2.0) 100113</u>			<u>1050</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-011 (5.0-5.5) 100113</u>			<u>1100</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
<u>WS-018 (Surface) 100113</u>		<u>↓</u>	<u>1140</u>	<u>X</u>		<u>X</u>			<u>9</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>[Signature]</u>		Date <u>10.1.13</u>	Time <u>1500</u>	Received by _____		Date	Time	9					
Standard <u>5 day</u> 4 day				Relinquished by _____		Date	Time	Received by _____		Date	Time						
72 hour 48 hour 24 hour				Relinquished by _____		Date	Time	Received by _____		Date	Time						
8 Data Package (circle if required)				Relinquished by Commercial Carrier		Received by _____		Date <u>10/2/13</u>	Time <u>1010</u>								
Type I - Full		Type VI (Raw Data)		NJ Reduced		Other _____		UPS <input checked="" type="checkbox"/> FedEx _____ Other _____		Temperature Upon Receipt <u>0.4-5.3C</u>		Custody Seals Intact? <input checked="" type="checkbox"/> Yes No					
Type I - Full		Type VI (Raw Data)		NJ Reduced		Other _____		UPS <input checked="" type="checkbox"/> FedEx _____ Other _____		Temperature Upon Receipt <u>0.4-5.3C</u>		Custody Seals Intact? <input checked="" type="checkbox"/> Yes No					

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7053 0713

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1423111 Sample # 7220711-29
Instructions on reverse side correspond with circled numbers.

2 of 2

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks	
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Air				Preservation Code										SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
Site Address <u>MAYFLOWER, AR</u>								N H N VOCs 8260B PAH 8270 SIM RECA Metals + Ni, Cr, Pb, V Diss. Metals MEM Oil Grease											
ExxonMobil PM <u>SCOTT Bushaw</u>		Cost Center/AFE		Total # of Containers															
Consultant/Office <u>ACCADIS</u>																			
Consultant PM <u>STEVE BAERCIC</u>		Consultant Phone # <u>919-302-6799</u>																	
Sampler <u>Dana Dost / Hans Van Allee</u>																			
2 Sample Identification		Collected		3															
		Date	Time	Grab	Composite														
<u>WS-003 (Surface) 100113</u>		<u>10-1-13</u>	<u>1150</u>	<u>X</u>															
<u>WS-007 (0.5-1.0) 100113</u>			<u>1200</u>	<u>X</u>															
<u>WS-001 (0.5-1.0) 100113</u>			<u>1210</u>	<u>X</u>															
<u>WS-EB-78-100113</u>			<u>1300</u>	<u>X</u>															
<u>WS-006 (0.5-1.0) 100113 MS/MSD</u>			<u>940</u>	<u>X</u>															
<u>WS-TB-165-100113</u>				<u>X</u>															
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>[Signature]</u>		Date	Time	Received by		Date	Time	9							
Standard <u>3 day</u> 4 day						<u>10-1-13</u>	<u>1500</u>												
72 hour 48 hour 24 hour																			
8 Data Package (circle if required)				Relinquished by Commercial Carrier		Temperature Upon Receipt <u>0.4-5.3 °C</u>		Received by <u>[Signature]</u>		Date	Time	Custody Seals Intact? <u>Yes</u> No							
Type I - Full				UPS <u>X</u> FedEx Other						<u>10/2/13</u>	<u>1000</u>								
Type VI (Raw Data)																			
NJ Reduced																			
Other _____																			

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Environmental Sample Administration (1423111)
 Receipt Documentation Log

Client/Project: Mayflower
 Date of Receipt: 10/2/13
 Time of Receipt: 1010
 Source Code: 60-1

Shipping Container Sealed: YES NO
 Custody Seal Present * : YES NO
 * Custody seal was intact unless otherwise noted in the discrepancy section
 Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	2.7	TB	WI	Y	B	
2	↓	0.7	↓	↓	↓	↓	
3		0.4					
4		5.3					
5		4.2					
6		1.4					

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: C. Asher 3647 Date/Time: 10/2/13 1050

Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

Inorganic Qualifiers

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

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

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

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

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

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