

## 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

September 26, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/23/2013

Group Number: 1420753

SDG: PEL65

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LL) #

WS-014(1.5-2.0)092113 Filt Grab Surface Water	7207721
WS-014(5.5-6.0)092113 Filt Grab Surface Water	7207722
WS-012(1.5-2.0)092113 Filt Grab Surface Water	7207723
WS-012(5.0-5.5)092113 Filt Grab Surface Water	7207724
WS-010(1.5-2.0)092113 Filt Grab Surface Water	7207725
WS-010(3.5-4.0)092113 Filt Grab Surface Water	7207726
WS-006(0.5-1.0)092113 Filt Grab Surface Water	7207727
WS-006(0.5-1.0)092113MS Filt Grab Surface Water	7207728
WS-006(0.5-1.0)092113MSD Filt Grab Surface Water	7207729
WS-006(0.5-1.0)092113DUP Filt Grab Surface Water	7207730
WS-005(Surface)092113 Filt Grab Surface Water	7207731
WS-002(Surface)092113 Filt Grab Surface Water	7207732
WS-011(1.5-2.0)092113 Filt Grab Surface Water	7207733
WS-011(5.0-5.5)092113 Filt Grab Surface Water	7207734
WS-018(Surface)092113 Filt Grab Surface Water	7207735
WS-003(Surface)092113 Filt Grab Surface Water	7207736
WS-007(0.5-1.0)092113 Filt Grab Surface Water	7207737
WS-001(0.5-1.0)092113 Filt Grab Surface Water	7207738
WS-EB-68-092113 Filt Grab Water	7207739

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

ELECTRONIC COPY TO  
ARCADIS

Attn: Stephen Barrick

ELECTRONIC COPY TO  
ARCADIS

Attn: Lyndi Mott

ELECTRONIC COPY TO  
ExxonMobil

Attn: Michael J. Firth

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

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

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Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1420753

**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)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207721  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 08:45 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1141F SDG#: PEL65-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0068 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0197	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:35	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:40	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-014(5.5-6.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207722  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 08:55 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1145F SDG#: PEL65-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0194	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:39	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-012(1.5-2.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207723  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:05 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1121F SDG#: PEL65-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0249	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:51	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:44	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-012(5.0-5.5)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207724  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:15 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1125F SDG#: PEL65-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:55	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-010(1.5-2.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207725  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:30 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1101F SDG#: PEL65-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0249	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:59	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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



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Sample Description: WS-010(3.5-4.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207726  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:40 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1103F SDG#: PEL65-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0257	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:03	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-006(0.5-1.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207727  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:50 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1060F SDG#: PEL65-07BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0233	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:11	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)092113MS Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207728  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:50 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1060F SDG#: PEL65-07MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.160	0.0068	0.0200	1
07046	Barium	7440-39-3	2.14	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0524	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.162	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.534	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.157	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0477	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.525	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.0010	0.000060	0.00020	1

### General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:23	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-006(0.5-1.0)092113MSD Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207729  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:50 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1060F SDG#: PEL65-07MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.160	0.0068	0.0200	1
07046	Barium	7440-39-3	2.13	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0518	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.204	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	0.157	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0476	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.520	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	0.00099	0.000060	0.00020	1

### General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:27	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)092113DUP Filtr Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207730  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 09:50 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1060F SDG#: PEL65-07DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0234	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 22:19	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 05:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-005 (Surface) 092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207731  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 10:25 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

105SF SDG#: PEL65-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	0.0076 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0301	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:07	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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

Sample Description: WS-002 (Surface) 092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207732  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 10:45 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

102SF SDG#: PEL65-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0225	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:11	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-011(1.5-2.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207733  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 10:55 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1111F SDG#: PEL65-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:15	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:09	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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



Sample Description: WS-011(5.0-5.5)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207734  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 11:05 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1115F SDG#: PEL65-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0187	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:19	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:15	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: **WS-018 (Surface) 092113 Filt Grab Surface Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7207735**  
 LL Group # **1420753**  
 Account # **14739**

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

Collected: 09/21/2013 11:15 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

118SF SDG#: PEL65-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0503	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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:23	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:17	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: WS-003 (Surface) 092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207736  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 11:25 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

103SF SDG#: PEL65-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0230	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:27	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:19	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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Sample Description: WS-007(0.5-1.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207737  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 12:15 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1070F SDG#: PEL65-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
		<b>SW-846 6010B</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0251	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
		<b>SW-846 7470A</b>	<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:39	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:21	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

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

Sample Description: WS-001(0.5-1.0)092113 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7207738  
LL Group # 1420753  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/21/2013 12:25 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

1010F SDG#: PEL65-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:43	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:23	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

Sample Description: **WS-EB-68-092113 Filt Grab Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7207739**  
 LL Group # **1420753**  
 Account # **14739**

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

Collected: 09/21/2013 13:00 by RL

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

Submitted: 09/23/2013 14:08

Reported: 09/26/2013 11:36

EB68F SDG#: PEL65-16EB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
<b>Metals Dissolved</b>						
	<b>SW-846 6010B</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0029 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	<b>SW-846 7470A</b>		<b>mg/l</b>	<b>mg/l</b>	<b>mg/l</b>	
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	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07066	Silver	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132671848004	09/25/2013 23:47	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132675713003	09/26/2013 06:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132671848004	09/24/2013 22:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132675713003	09/25/2013 05:30	Damary Valentin	1

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

## Quality Control Summary

Client Name: ExxonMobil c/o Arcadis  
Reported: 09/26/13 at 11:36 AM

Group Number: 1420753

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: 132671848004	Sample number(s): 7207721-7207739								
Arsenic	N.D.	0.0068	0.0200	mg/l	103		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	105		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	105		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	101		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	102		90-110		
Batch number: 132675713003	Sample number(s): 7207721-7207739								
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: 132671848004	Sample number(s): 7207721-7207739 UNSPK: 7207727 BKG: 7207727								
Arsenic	107	106	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	106	105	78-118	0	20	0.0233	0.0234	1 (1)	20
Cadmium	105	104	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	103	102	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	108	108	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	107	105	86-115	2	20	N.D.	N.D.	0 (1)	20
Selenium	105	105	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	95	95	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	105	104	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132675713003	Sample number(s): 7207721-7207739 UNSPK: 7207727 BKG: 7207727								
Mercury	102	99	80-120	3	20	N.D.	N.D.	0 (1)	20

\*- Outside of specification

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

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

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







Rachel L. Kreamer

A# 14739

Gr# 1420753

Samples 7207721-39

**From:** Mott, Lyndi [Lyndi.Mott@arcadis-us.com]  
**Sent:** Tuesday, September 24, 2013 9:15 AM  
**To:** Rachel L. Kreamer  
**Cc:** Kathy Klinefelter  
**Subject:** RE: Collection time question on yesterday's surface waters

The collection time for sample WS-018(Surface)092113 is 1115.

Lyndi Mott

-----Original Message-----

**From:** Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]  
**Sent:** Tuesday, September 24, 2013 6:58 AM  
**To:** Mott, Lyndi  
**Cc:** Kathy Klinefelter  
**Subject:** Collection time question on yesterday's surface waters

Good morning Lyndi.

The label from one bottle of sample WS-018(Surface)092113 had a collection time of 1105 on it. The chain says 1115. Just confirming that we should use 1115 on the report.

Thanks  
Rachel

-----Original Message-----

**From:** 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]  
**Sent:** Tuesday, September 24, 2013 7:54 AM  
**To:** Rachel L. Kreamer  
**Subject:**

This E-mail was sent from "RNP367EC2" (MP 4001/LD140).

Scan Date: 09.24.2013 07:53:38 (-0400)  
Queries to: 39Scanner@lancasterlabs.com

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Environmental Sample Administration 1420753  
Receipt Documentation Log

Client/Project: ExxonMobil  
Date of Receipt: 9/23/13  
Time of Receipt: 1408  
Source Code: 01

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	1.1	TB	WI	Y	B	
2	↓	1.0	↓	↓	↓	↓	
3	↓	0.3	↓	↓	↓	↓	
4	↓	1.7	↓	↓	↓	↓	
5	↓	0.4	↓	↓	↓	↓	
6	↓	0.5	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

1 bottle ws. 0.18 (surface) 092113 time on 1 bottle = 1105

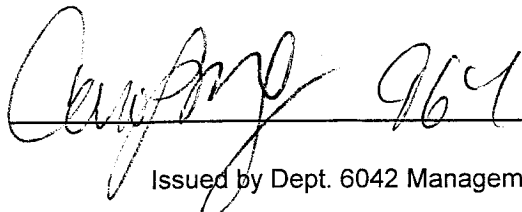
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Unpacker Signature/Emp#:  964 Date/Time: 9/23/13 1445

Issued by Dept. 6042 Management

Environmental Sample Administration  
Receipt Documentation Log

1420753

Client/Project: ExxonMobil  
Date of Receipt: 9/23/13  
Time of Receipt: 1408  
Source Code: 01

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	2.2	TB	WI	Y	B	
2	↓	4.5	↓	↓	↓	↓	
3	↓	0.9	↓	↓	↓	↓	
4	↓	3.3	↓	↓	↓	↓	
5	↓	0.9	↓	↓	↓	↓	
6	↓	0.4	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Unpacker Signature/Emp#: [Signature] 964 Date/Time: 9/23/13 1445

Issued by Dept. 6042 Management

Environmental Sample Administration  
Receipt Documentation Log

1426753

Client/Project: Exxon Mobil  
 Date of Receipt: 9/23/13  
 Time of Receipt: 1408  
 Source Code: 01

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
1/13	DT121	2.8	TB	WI	Y	B	
2							
3							
4							
5							
6							

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

Paperwork Discrepancy/Unpacking Problems:

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Unpacker Signature/Emp#: [Signature] 964 Date/Time: 9/23/13 1445  
9/23/13  
 Issued by Dept. 6042 Management

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	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**

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns  $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

**Inorganic Qualifiers**

- B** Value is  $<$ CRDL, but  $\geq$ IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- \*** Duplicate analysis not within control limits
- +** 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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