

## ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ExxonMobil  
Mobil Pipeline Company  
PO Box 4416  
Houston TX 77210-4416

August 12, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 08/05/2013

Group Number: 1409109

SDG: PEK06

PO Number: ARCADIS

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-014(1.5-2.0)080313 Filt Grab Surface Water	7150156
WS-014(5.5-6.0)080313 Filt Grab Surface Water	7150157
WS-012(1.5-2.0)080313 Filt Grab Surface Water	7150158
WS-012(5.0-5.5)080313 Filt Grab Surface Water	7150159
WS-010(1.5-2.0)080313 Filt Grab Surface Water	7150160
WS-010(3.5-4.0)080313 Filt Grab Surface Water	7150161
WS-006(0.5-1.0)080313 Filt Grab Surface Water	7150162
WS-006(0.5-1.0)080313MS Filt Grab Surface Water	7150163
WS-006(0.5-1.0)080313MSD Filt Grab Surface Water	7150164
WS-006(0.5-1.0)080313DUP Filt Grab Surface Water	7150165
WS-005(Surface)080313 Filt Grab Surface Water	7150166
WS-011(1.5-2.0)080313 Filt Grab Surface Water	7150167
WS-011(5.0-5.5)080313 Filt Grab Surface Water	7150168
WS-003(Surface)080313 Filt Grab Surface Water	7150169
WS-018(Surface)080313 Filt Grab Surface Water	7150170
WS-002(Surface)080313 Filt Grab Surface Water	7150171
WS-007(0.5-1.0)080313 Filt Grab Surface Water	7150172
WS-001(0.5-1.0)080313 Filt Grab Surface Water	7150173
WS-EB-19-080313 Filt Grab Water	7150174

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

ELECTRONIC      ARCADIS  
COPY TO  
ELECTRONIC      ARCADIS  
COPY TO

Attn: Stephen Barrick

Attn: Lyndi Mott

ELECTRONIC COPY TO	ExxonMobil	Attn: Michael J. Firth
ELECTRONIC COPY TO	ARCADIS	Attn: Emily Leamer
ELECTRONIC COPY TO	ARCADIS	Attn: Rhiannon Parmalee
ELECTRONIC COPY TO	ARCADIS	Attn: Jamie Pritchard
ELECTRONIC COPY TO	ExxonMobil	Attn: Michael L Sixsmith
ELECTRONIC COPY TO	ExxonMobil	Attn: Julie Foster
ELECTRONIC COPY TO	ExxonMobil	Attn: Carl Wideman

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

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Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1409109

**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)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150156  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 12:20 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3141F SDG#: PEK06-01

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	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0170	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	132181848003	08/09/2013 15:26	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:26	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150157  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 12:30 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3145F SDG#: PEK06-02

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	0.0149	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	132181848003	08/09/2013 15:30	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:30	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150158  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 12:50 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3121F SDG#: PEK06-03

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	0.0147	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	132181848003	08/09/2013 15:42	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:42	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150159  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:00 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3125F SDG#: PEK06-04

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	0.0079 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0128	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	132181848003	08/09/2013 15:46	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:46	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150160  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:10 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3101F SDG#: PEK06-05

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	0.0099	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	132181848003	08/09/2013 15:50	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:50	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150161  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:20 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3103F SDG#: PEK06-06

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	0.0132	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	132181848003	08/09/2013 15:54	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:54	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 04:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150162  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:30 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3060F SDG#: PEK06-07BKG

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	0.0132	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	132181848003	08/09/2013 15:03	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:03	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)080313MS Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150163  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:30 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3060F SDG#: PEK06-07MS

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	0.155	0.0068	0.0200	1
07046	Barium	7440-39-3	2.05	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0501	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.206	0.0016	0.0150	1
07055	Lead	7439-92-1	0.152	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.525	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.154	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0479	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.513	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	0.00096	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	132181848003	08/09/2013 15:14	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:14	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:10	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)080313MSD Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150164  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 08/05/2013 10:10

PO Box 4416

Reported: 08/12/2013 09:40

Houston TX 77210-4416

3060F SDG#: PEK06-07MSD

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	0.151	0.0068	0.0200	1
07046	Barium	7440-39-3	2.05	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0497	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.208	0.0016	0.0150	1
07055	Lead	7439-92-1	0.152	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.521	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.153	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0481	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.512	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	0.00095	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	132181848003	08/09/2013 15:18	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:18	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)080313DUP Filtr Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150165  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 13:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 08/05/2013 10:10

PO Box 4416

Reported: 08/12/2013 09:40

Houston TX 77210-4416

3060F SDG#: PEK06-07DUP

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	0.0135	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	132181848003	08/09/2013 15:10	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:10	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-005 (Surface) 080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150166  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 14:00 by HVA

ExxonMobil  
Mobil Pipeline Company  
PO Box 4416  
Houston TX 77210-4416

Submitted: 08/05/2013 10:10

Reported: 08/12/2013 09:40

305SF SDG#: PEK06-08

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	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0051	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	132181848003	08/09/2013 15:58	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 15:58	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:14	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150167  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 14:30 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3111F SDG#: PEK06-09

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	0.0101	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	132181848003	08/09/2013 16:01	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:01	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150168  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 14:40 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3115F SDG#: PEK06-10

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	0.0071 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0118	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	132181848003	08/09/2013 16:05	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:05	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-003 (Surface) 080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150169  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 14:50 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

303SF SDG#: PEK06-11

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	0.0119	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<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	132181848003	08/09/2013 16:09	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:09	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-018 (Surface) 080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150170  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 15:00 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

318SF SDG#: PEK06-12

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	0.0077 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0151	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	132181848003	08/09/2013 16:13	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:13	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-002 (Surface) 080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150171  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 15:20 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

302SF SDG#: PEK06-13

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	0.0069	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	132181848003	08/09/2013 16:17	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:17	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150172  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 15:30 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3070F SDG#: PEK06-14

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	0.0189	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.0022 J	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		<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	132181848003	08/09/2013 16:29	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:29	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)080313 Filt Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7150173  
LL Group # 1409109  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 08/03/2013 15:40 by HVA ExxonMobil  
Mobil Pipeline Company  
Submitted: 08/05/2013 10:10 PO Box 4416  
Reported: 08/12/2013 09:40 Houston TX 77210-4416

3010F SDG#: PEK06-15

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	0.0111	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	132181848003	08/09/2013 16:33	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:33	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

Sample Description: **WS-EB-19-080313 Filt Grab Water**  
**Mayflower, AR**  
**Pipeline Incident**

LL Sample # **WW 7150174**  
 LL Group # **1409109**  
 Account # **14739**

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

Collected: 08/03/2013 16:00 by HVA ExxonMobil  
 Submitted: 08/05/2013 10:10 Mobil Pipeline Company  
 Reported: 08/12/2013 09:40 PO Box 4416  
 Houston TX 77210-4416

EB19F SDG#: PEK06-16EB\*

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	0.0034 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	132181848003	08/09/2013 16:37	Eric L Eby	1
07046	Barium	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07051	Chromium	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07055	Lead	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07061	Nickel	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07036	Selenium	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07066	Silver	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
07071	Vanadium	SW-846 6010B	1	132181848003	08/09/2013 16:37	Eric L Eby	1
00259	Mercury	SW-846 7470A	1	132185713005	08/08/2013 05:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132181848003	08/07/2013 10:37	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132185713005	08/07/2013 16:05	Nelli S Markaryan	1

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 08/12/13 at 09:40 AM

Group Number: 1409109

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: 132181848003	Sample number(s): 7150156-7150174								
Arsenic	0.0071 J	0.0068	0.0200	mg/l	105		90-113		
Barium	0.00034 J	0.00033	0.0050	mg/l	102		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	103		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	107		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	103		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	97		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	103		90-110		
Batch number: 132185713005	Sample number(s): 7150156-7150174								
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: 132181848003	Sample number(s): 7150156-7150174 UNSPK: 7150162 BKG: 7150162								
Arsenic	103	101	81-123	2	20	N.D.	N.D.	0 (1)	20
Barium	102	102	78-118	0	20	0.0132	0.0135	2 (1)	20
Cadmium	100	99	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	103	104	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	101	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	105	104	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	102	102	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	96	96	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	103	102	90-111	0	20	N.D.	N.D.	0 (1)	20
Batch number: 132185713005	Sample number(s): 7150156-7150174 UNSPK: 7150162 BKG: 7150162								
Mercury	96	95	80-120	2	20	N.D.	N.D.	0 (1)	20

\*- Outside of specification

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

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

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



# ExxonMobil Analysis Request/Chain of Custody



**Lancaster Laboratories Environmental**

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only  
 Group # 1409109 Sample # 7150156-74  
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>				Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>				Preservation Code								SCR#: _____ Preservation Codes H = HCl      T = Thiosulfate N = HNO <sub>3</sub> B = NaOH S = H <sub>2</sub> SO <sub>4</sub> O = Other			
Site Address <u>MAYFLOWER, AR.</u>								H	N	H									
ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE		Total # of Containers <u>VOC's 8260B</u> <u>PAH's 8270 SIM</u> <u>HEAVY METALS</u> <u>RODA-Metals T, D, P, M, G</u> <u>DISS Metals</u> <u>HEAVY OIL &amp; GREASE</u>															
Consultant/Office <u>ARCADIS</u>		Consultant Phone # <u>919 202 6799</u>																	
Consultant PM <u>STEVE BARRICK</u>		Sampler <u>H. VAN ALLER / J. WALDRON</u>																	
2 Sample Identification		3 Collected																	
		Date	Time	Grab	Composite														
<u>WS-018 (SURFACE) 080313</u>		<u>8/3/13</u>	<u>1500</u>	<input checked="" type="checkbox"/>						<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>WS-012 (SURFACE) 080313</u>		<u>8/3/13</u>	<u>1520</u>	<input checked="" type="checkbox"/>						<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>WS-007 (0.5-1.0) 080313</u>		<u>8/3/13</u>	<u>1530</u>	<input checked="" type="checkbox"/>						<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>WS-001 (0.5-1.0) 080313</u>		<u>8/3/13</u>	<u>1540</u>	<input checked="" type="checkbox"/>						<u>9</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
<u>WS-TB-114-080313</u>		<u>8/3/13</u>		<input checked="" type="checkbox"/>						<u>2</u>	<input checked="" type="checkbox"/>					<u>VOC's 8260B only</u>			
<u>WS-EB-19-080313</u>		<u>8/3/13</u>	<u>1600</u>	<input checked="" type="checkbox"/>						<u>7</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
7 Turnaround Time Requested (TAT) (please circle) Standard <u>5 day</u> 4 day 72 hour      48 hour      24 hour				Relinquished by _____ Date <u>8/4/13</u> Time <u>1600</u>		Received by _____ Date _____ Time _____		Relinquished by _____ Date _____ Time _____		Received by _____ Date _____ Time _____		Relinquished by _____ Date _____ Time _____		Received by _____ Date _____ Time _____		Relinquished by Commercial Carrier UPS _____ FedEx _____ Other <u>SOUTHWEST</u>		Received by <u>Brenely Bouchy</u> Date <u>8-5-13</u> Time <u>1010</u>	
8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____				EDD (circle if required) Locus EIM (default) Other _____		Temperature Upon Receipt <u>0.3-3.0C</u>				Custody Seals Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									

Rachel L. Kreamer *A# 14739, Gr. 1409109. Samples 7150156-74*

---

**From:** Chandler, Jennifer [Jennifer.Chandler@arcadis-us.com]  
**Sent:** Monday, August 05, 2013 4:47 PM  
**To:** Rachel L. Kreamer  
**Subject:** RE: More COC/Label Discrepancies

Rachel,

Please use WS-011(1.5-2.0), as listed on the COC.  
As for sample WS-EB-20-080413, yes, please use 1600.

Thanks,

Jennifer Chandler | Scientist 2 | jennifer.chandler@arcadis-us.com ARCADIS U.S., Inc. |  
630 Plaza Drive, Suite 100 | Highlands Ranch, CO, 80129 T. 303.471.3549 | F. 720.344.3535  
www.arcadis-us.com Please consider the environment before printing this email.

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

From: Rachel L. Kreamer [mailto:RKreamer@lanasterlabs.com]  
Sent: Monday, August 05, 2013 2:41 PM  
To: Chandler, Jennifer  
Cc: Kathy Klinefelter  
Subject: More COC/Label Discrepancies

Jennifer,

So sorry, but I have a few more questions. I attached chains and the first page of the doc log for the surface waters.

On the chain from 8/3, sample WS-011(1.5-2.0) is labeled WS-11(1.0-1.5).  
What should we use on the report?

On the chain from 8/4, sample WS-EB-20-080413 has no collection time.  
The labels list a collection time of 1600. Should we use 1600?

Thanks,  
RADchel

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

From: 39Scanner@lanasterlabs.com [mailto:39Scanner@lanasterlabs.com]  
Sent: Monday, August 05, 2013 4:34 PM  
To: Rachel L. Kreamer  
Subject:

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

Scan Date: 08.05.2013 16:34:28 (-0400)  
Queries to: 39Scanner@lanasterlabs.com

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Environmental Sample Administration  
Receipt Documentation Log

1409109

Client/Project: Exxon mobil  
Date of Receipt: 8.5.13  
Time of Receipt: 1010  
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	DH21	0.5	TB	WI	Y	B	
2	↓	0.3	↓	↓	↓	↓	
3	↓	1.5	↓	↓	↓	↓	
4	↓	1.9	↓	↓	↓	↓	
5	↓	1.2	↓	↓	↓	↓	
6	↓	0.5	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

~~WS-011 (1.0)~~ BUB 2299 ③ 8.5.13  
 WS-011 (1.5-2.0) = WS-011 (1.0-1.5) Gr. 1409108 + 1409109  
 WS-EB-20 Time = 1600 - Gr. 1409110 + 1409111

Unpacker Signature/Emp#: Branely Barclay 2299 Date/Time: 8.5.13 1213

Issued by Dept. 6042 Management

Environmental Sample Administration  
Receipt Documentation Log

1409109

Client/Project: Exxon mobil  
Date of Receipt: 8-5-13  
Time of Receipt: 1010  
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
77	DH21	0.9	TB	wi	Y	B	
78	↓	0.6	↓	↓	↓	↓	
79	↓	1.2	↓	↓	↓	↓	
710	↓	3.0	↓	↓	↓	↓	
711	1396	2.4	ST	↓	↓	↓	
712	DH21	1.5	TB	↓	↓	↓	

Number of Trip Blanks received NOT listed on chain of custody: \_\_\_\_\_

Paperwork Discrepancy/Unpacking Problems:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Unpacker Signature/Emp#: Buandy Barclay 2299 Date/Time: 8-5-13 1213

Issued by Dept. 6042 Management

Environmental Sample Administration  
Receipt Documentation Log

1409109

Client/Project: Exxon mobil  
Date of Receipt: 8.5.13  
Time of Receipt: 1010  
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
13	DH121	1.0	TB	WI	Y	B	
14	↓	2.9	↓	↓	↓	↓	
3							
4							
5							
6							

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

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

Unpacker Signature/Emp#: Biranchy Banley 2299 Date/Time: 8.5.13 1213

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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