

ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

July 23, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/19/2013

Group Number: 1405272

SDG: PEJ24

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-011(1.5-2.0)071813 Filt Grab Surface Water
WS-014(1.5-2.0)071813 Filt Grab Surface Water
WS-012(1.5-2.0)071813 Filt Grab Surface Water
WS-010(1.5-2.0)071813 Filt Grab Surface Water
WS-003(Surface)071813 Filt Grab Surface Water
WS-018(Surface)071813 Filt Grab Surface Water
WS-002(Surface)071813 Filt Grab Surface Water
WS-005(Surface)071813 Filt Grab Surface Water
WS-001(0.5-1.0)071813 Filt Grab Surface Water
WS-007(0.5-1.0)071813 Filt Grab Surface Water
WS-006(0.5-1.0)071813 Filt Grab Surface Water
WS-006(0.5-1.0)071813MS Filt Grab Surface Water
WS-006(0.5-1.0)071813MSD Filt Grab Surface Water
WS-006(0.5-1.0)071813DUP Filt Grab Surface Water
WS-EB-04-071813 Filt Grab Water

7132105
7132106
7132107
7132108
7132109
7132110
7132111
7132112
7132113
7132114
7132115
7132116
7132117
7132118
7132119

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

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

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1405272

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-011(1.5-2.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132105
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 09:05 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F11 SDG#: PEJ24-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0080	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00044	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	132011848001	07/22/2013 07:04	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:17	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:04	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:04	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:04	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:04	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:04	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:17	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:17	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:24	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-014(1.5-2.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132106
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 10:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F14 SDG#: PEJ24-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0116	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00077	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	132011848001	07/22/2013 07:08	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:21	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:08	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:08	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:08	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:08	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:08	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:21	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:21	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:26	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132107
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 10:35 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F12 SDG#: PEJ24-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0111	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
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	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	132011848001	07/22/2013 07:19	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:32	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:19	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:19	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:19	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:19	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:19	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:32	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:32	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:28	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132108
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 11:10 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F10 SDG#: PEJ24-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0069	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
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.00038	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	132011848001	07/22/2013 07:23	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:36	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:23	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:23	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:23	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:23	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:23	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:36	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:36	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:30	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132109
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 12:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F03 SDG#: PEJ24-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0066	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:40	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:27	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:40	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:40	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:32	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132110
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 12:45 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F18 SDG#: PEJ24-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0157	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:44	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:31	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:44	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:44	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:34	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132111
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 13:35 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F02 SDG#: PEJ24-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0059	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:47	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:35	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:47	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:47	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:36	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132112
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 14:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F05 SDG#: PEJ24-08

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

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:51	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:39	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:51	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:51	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:42	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132113
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 14:30 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F01 SDG#: PEJ24-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0112	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:55	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:42	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:55	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:55	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132114
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 14:45 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F07 SDG#: PEJ24-10

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

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:59	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:46	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:59	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:59	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071813 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132115
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 15:25 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F06 SDG#: PEJ24-11BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0166	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 11:54	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 06:41	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 11:54	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 11:54	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071813MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132116
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 15:25 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F06 SDG#: PEJ24-11MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.150	0.0068	0.0200	1
07046	Barium	7440-39-3	2.17	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0503	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.156	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.518	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.150	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0516	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.546	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
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	132011848001	07/22/2013 06:53	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:05	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 06:53	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 06:53	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 06:53	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 06:53	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 06:53	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:05	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:05	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071813MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132117
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 15:25 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18F06 SDG#: PEJ24-11MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	SW-846 6010B 7440-38-2	mg/l 0.145	mg/l 0.0068	mg/l 0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0494	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.203	0.0016	0.0150	1
07055	Lead	7439-92-1	0.152	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.510	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.148	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0493	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.531	0.0020	0.0050	1
SW-846 7470A						
00259	Mercury	7439-97-6	mg/l 0.0010	mg/l 0.000060	mg/l 0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:09	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 06:56	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:09	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:09	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)071813DUP Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132118
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 15:25 by HVA

ExxonMobil

Submitted: 07/19/2013 09:10

Mobil Pipeline Company

Reported: 07/23/2013 13:12

PO Box 4416

Houston TX 77210-4416

18F06 SDG#: PEJ24-11DUP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0169	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 12:02	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 06:49	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 12:02	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 12:02	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 07:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Sample Description: WS-EB-04-071813 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7132119
LL Group # 1405272
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/18/2013 12:00 by HVA

ExxonMobil

Mobil Pipeline Company

Submitted: 07/19/2013 09:10

PO Box 4416

Reported: 07/23/2013 13:12

Houston TX 77210-4416

18FE4 SDG#: PEJ24-12EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.00055 J	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0079	0.00030	0.0010	5

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	132011848001	07/22/2013 07:50	Joanne M Gates	1
07046	Barium	SW-846 6010B	1	132011848001	07/22/2013 13:03	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	132011848001	07/22/2013 07:50	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	132011848001	07/22/2013 07:50	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	132011848001	07/22/2013 07:50	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	132011848001	07/22/2013 07:50	Joanne M Gates	1
07036	Selenium	SW-846 6010B	1	132011848001	07/22/2013 07:50	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	132011848001	07/22/2013 13:03	Joanne M Gates	1
07071	Vanadium	SW-846 6010B	1	132011848001	07/22/2013 13:03	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	132035713001	07/23/2013 10:59	Damary Valentin	5
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132011848001	07/21/2013 09:30	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132035713001	07/22/2013 16:40	Nelli S Markaryan	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 07/23/13 at 01:12 PM

Group Number: 1405272

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: 132011848001	Sample number(s): 7132105-7132119								
Arsenic	N.D.	0.0068	0.0200	mg/l	100		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	106		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	101		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	101		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	104		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	104		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	101		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	102		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	108		90-110		
Batch number: 132035713001	Sample number(s): 7132105-7132119								
Mercury	N.D.	0.00006	0.00020	mg/l	105		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: 132011848001	Sample number(s): 7132105-7132119 UNSPK: 7132115 BKG: 7132115								
Arsenic	100	97	81-123	3	20	N.D.	N.D.	0 (1)	20
Barium	108	104	78-118	3	20	0.0166	0.0169	2 (1)	20
Cadmium	101	99	83-116	2	20	N.D.	N.D.	0 (1)	20
Chromium	102	101	81-120	0	20	N.D.	N.D.	0 (1)	20
Lead	104	101	75-125	3	20	N.D.	N.D.	0 (1)	20
Nickel	104	102	86-115	2	20	N.D.	N.D.	0 (1)	20
Selenium	100	99	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	103	99	75-125	4	20	N.D.	N.D.	0 (1)	20
Vanadium	109	106	90-111	3	20	N.D.	N.D.	0 (1)	20
Batch number: 132035713001	Sample number(s): 7132105-7132119 UNSPK: 7132115 BKG: 7132115								
Mercury	103	105	80-120	1	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 14739

For Eurofins Lancaster Laboratories use only
Group # 1405272 Sample # 7132105-19
Instructions on reverse side correspond with circled numbers.

1 of 2

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks	
Facility #/SID <u>Mayflower Pipeline Incident</u>				☐ Sediment ☐ Ground ☒ Surface ☐ Potable ☐ NPDES ☐ Air				Preservation Code												SCR#: _____ Preservation Codes: H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
Site Address <u>Mayflower, AR</u>																					
ExxonMobil PM <u>Scott Bushroe</u>																				6 Remarks * Lab to filter and preserve upon receipt	
Consultant/Office <u>ARCADIS</u>																					
Consultant PM <u>Steve Barnick</u>																					
Consultant Phone # <u>919 202 6779</u>																					
Sampler <u>HANS VAN ALLER / Lora de Marthy</u>																					
2 Sample Identification		3 Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers												
Date	Time																				
WS-011 (1.5-2.0)	071813	905	X				X		9	X	X	X	X	X							
WS-014 (1.5-2.0)	071813	1000	X				X		9	X	X	X	X	X							
WS-012 (1.5-2.0)	071813	1035	X				X		9	X	X	X	X	X							
WS-010 (1.5-2.0)	071813	1110	X				X		9	X	X	X	X	X							
WS-003 (Surface)	071813	1230	X				X		9	X	X	X	X	X							
WS-018 (Surface)	071813	1245	X				X		9	X	X	X	X	X							
WS-002 (Surface)	071813	1335	X				X		9	X	X	X	X	X							
WS-005 (Surface)	071813	1400	X				X		9	X	X	X	X	X							
WS-001 (0.5-1.0)	071813	1430	X				X		9	X	X	X	X	X							
WS-007 (0.5-1.0)	071813	1445	X				X		9	X	X	X	X	X							
WS-006 (0.5-1.0)	071813	1525	X				X		9	X	X	X	X	X							
WS-006 (0.5-1.0)	071813 MS/MSD	1525	X				X		18	X	X	X	X	X							
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>H Van Aller</u>				Date <u>7/18/13</u>		Time <u>1600</u>		Received by		Date		Time					
Standard <u>5 day</u> 4 day				Relinquished by				Date		Time		Received by		Date		Time					
72 hour 48 hour 24 hour				Relinquished by				Date		Time		Received by		Date		Time					
8 Data Package (circle if required)				Relinquished by Commercial Carrier				Date		Time		Received by		Date		Time					
Type I - Full				UPS _____ FedEx <u>X</u> Other _____								<u>Deborah Resell</u>		<u>7/19/13</u>		<u>0910</u>					
Type VI (Raw Data)				Temperature Upon Receipt <u>14-3.7 °C</u>								Custody Seals Intact?		<u>Yes</u>		No					
NJ Reduced																					
Other _____																					

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

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

Issued by Dept. 40 Management

7053 0413

eurofins

Acct. # 14739

For Eurofins Lancaster Laboratories use only
 Cup # 1405272 Sample # 7132105-19
 Instructions on reverse side correspond with circled numbers.

- 2 of 2

[illegible]

Issued by Dept. 40 Management

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

7053 0413

Rachel L. Kreamer A#14739 Gr# 1405272 Samples 7132105-19

From: Lipka, Shelby [Shelby.Lipka@arcadis-us.com]
Sent: Friday, July 19, 2013 7:33 AM
To: Rachel L. Kreamer; Van Aller, Hans; Kathy Klinefelter; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Parmelee, Rhiannon; Pritchard, Jamie
Subject: RE: Mayflower COCs Surface water sampling 071813

Yes, need Ni, V, Ca, Mg and hardness with the RCRA metals for the SW samples.

No soil samples were shipped yesterday.

Thank you,
 Shelby

From: Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]
Sent: Friday, July 19, 2013 6:06 AM
To: Van Aller, Hans; Kathy Klinefelter; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie
Subject: RE: Mayflower COCs Surface water sampling 071813

Good morning.

Confirming that you need Ni, V, Ca, Mg, & hardness with the RCRA metals. They are not noted on the chain.

Also, can you confirm that no soil samples are expected today? We did not get any soil chains.

Thanks,
 Rachel

From: Van Aller, Hans [mailto:Hans.VanAller@arcadis-us.com]
Sent: Thursday, July 18, 2013 8:13 PM
To: Van Aller, Hans; Kathy Klinefelter; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie
Subject: Mayflower COCs Surface water sampling 071813

Hello All

Attached are the COCs from today's surface water sampling activities.

Thanks,

Hans H. van Aller IV | Field Tech 3 | Hans.VanAller@arcadis-us.com
 ARCADIS U.S., Inc. | 630 Plaza Drive, Suite 100 | Highlands Ranch, CO 80129
 T. 720.344.3500 | M.720.635.0173 | F. 720.344.3535
www.arcadis-us.com

ARCADIS, Imagine the result

Please consider the environment before printing this email.

7/19/2013

Environmental Sample Administration
Receipt Documentation Log

1405272

Client/Project: XOM MayflowerShipping Container Sealed: YES NODate of Receipt: 7/19/13Custody Seal Present * : YES NOTime of Receipt: 0910* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: SO-1Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT121	1.3	TB	WI	Y	B	
2		1.7					
3		3.7					
4		1.4					
5		1.9					
6							

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: JA Neslund / 208 Date/Time: 7/19/13 / 0925

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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