

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

November 06, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/30/2013

Group Number: 1430029

SDG: PEM54

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample Description

Lancaster Labs (LL) #

WS-018(Surface)102913 Filt Grab Surface Water	7256555
WS-003(Surface)102913 Filt Grab Surface Water	7256556
WS-007(0.5-1.0)102913 Filt Grab Surface Water	7256557
WS-001(0.5-1.0)102913 Filt Grab Surface Water	7256558
WS-005(Surface)102913 Filt Grab Surface Water	7256559
WS-014(1.5-2.0)102913 Filt Grab Surface Water	7256560
WS-014(5.5-6.0)102913 Filt Grab Surface Water	7256561
WS-012(1.5-2.0)102913 Filt Grab Surface Water	7256562
WS-012(5.0-5.5)102913 Filt Grab Surface Water	7256563
WS-010(1.5-2.0)102913 Filt Grab Surface Water	7256564
WS-006(0.5-1.0)102913 Filt Grab Surface Water	7256565
WS-006(0.5-1.0)102913MS Filt Grab Surface Water	7256566
WS-006(0.5-1.0)102913MSD Filt Grab Surface Water	7256567
WS-006(0.5-1.0)102913DUP Filt Grab Surface Water	7256568
WS-002(Surface)102913 Filt Grab Surface Water	7256569
WS-EB-106-102913 Filt Grab Water	7256570

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	ExxonMobil	Attn: Michael L Sixsmith
ELECTRONIC COPY TO	ExxonMobil	Attn: Julie Foster

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1430029

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.

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Sample Description: WS-018(Surface)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256555
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 08:40 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2918F SDG#: PEM54-01

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	0.0221	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	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 01:58	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:52	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 17:57	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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Sample Description: WS-003 (Surface)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256556
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 09:00 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2903F SDG#: PEM54-02

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	0.0212	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	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:56	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 17:59	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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Sample Description: WS-007(0.5-1.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256557
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 09:20 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2907F SDG#: PEM54-03

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	0.0199	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	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	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:13	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:08	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:01	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256558
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 09:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2901F SDG#: PEM54-04

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	0.0186	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	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:17	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:12	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:08	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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Sample Description: WS-005 (Surface) 102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256559
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 09:50 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2905F SDG#: PEM54-05

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	0.0301	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		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	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:21	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:16	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:10	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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Sample Description: WS-014(1.5-2.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256560
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 10:40 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2904F SDG#: PEM54-06

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	0.0169	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	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:24	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:20	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:12	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256561
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 10:50 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2914F SDG#: PEM54-07

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	0.0164	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	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:28	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:24	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:14	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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

Sample Description: WS-012(1.5-2.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256562
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 11:00 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

29F12 SDG#: PEM54-08

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	0.0168	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	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:32	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:27	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:16	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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

Sample Description: WS-012(5.0-5.5)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256563
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 11:10 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2912F SDG#: PEM54-09

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	0.0165	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	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:36	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:31	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:18	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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

Sample Description: WS-010(1.5-2.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256564
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 11:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2910F SDG#: PEM54-10

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	0.0176	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	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:40	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:35	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:20	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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Sample Description: WS-006(0.5-1.0)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256565
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 12:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2906F SDG#: PEM54-11BKG

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	0.0183	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	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 01:35	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:29	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:22	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)102913MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256566
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 12:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2906F SDG#: PEM54-11MS

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	0.157	0.0068	0.0200	1
07046	Barium	7440-39-3	2.14	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0524	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.167	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.526	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.154	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0482	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.493	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	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 01:46	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:40	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:26	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)102913MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256567
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 12:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2906F SDG#: PEM54-11MSD

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	0.154	0.0068	0.0200	1
07046	Barium	7440-39-3	2.12	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0520	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.204	0.0016	0.0150	1
07055	Lead	7439-92-1	0.164	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.523	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	0.493	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	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 01:50	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:44	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:32	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)102913DUP Filtr Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256568
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 12:30 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2906F SDG#: PEM54-11DUP

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	0.0185	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	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 01:43	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 19:37	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:24	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

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

Sample Description: WS-002 (Surface)102913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7256569
LL Group # 1430029
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/29/2013 13:20 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

2902F SDG#: PEM54-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0167	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	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:43	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:39	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:34	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Sample Description: **WS-EB-106-102913 Filt Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7256570**
 LL Group # **1430029**
 Account # **14739**

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

Collected: 10/29/2013 14:00 by RL

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

Submitted: 10/30/2013 09:20

Reported: 11/06/2013 05:14

106-F SDG#: PEM54-13EB*

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	0.00041 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	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	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07046	Barium	SW-846 6010B	1	133081848001	11/06/2013 02:47	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07051	Chromium	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07055	Lead	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07061	Nickel	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07036	Selenium	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
07071	Vanadium	SW-846 6010B	1	133081848001	11/05/2013 20:43	Katlin N Cataldi	1
00259	Mercury	SW-846 7470A	1	133045713003	11/02/2013 18:36	Parker D Lindstrom	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	133081848001	11/05/2013 10:25	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	133045713003	10/31/2013 15:15	Nelli S Markaryan	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis
Reported: 11/06/13 at 05:14 AM

Group Number: 1430029

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: 133045713003	Sample number(s): 7256555-7256570								
Mercury	N.D.	0.00006	0.00020	mg/l	103		80-120		
		0							
Batch number: 133081848001	Sample number(s): 7256555-7256570								
Arsenic	N.D.	0.0068	0.0200	mg/l	99		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	105		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	107		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	97		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	98		90-110		

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: 133045713003	Sample number(s): 7256555-7256570 UNSPK: 7256565 BKG: 7256565								
Mercury	103	104	80-120	1	20	N.D.	N.D.	0 (1)	20
Batch number: 133081848001	Sample number(s): 7256555-7256570 UNSPK: 7256565 BKG: 7256565								
Arsenic	105	102	81-123	2	20	N.D.	N.D.	0 (1)	20
Barium	106	105	78-118	1	20	0.0183	0.0185	1 (1)	20
Cadmium	105	104	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	102	102	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	111	110	75-125	1	20	N.D.	N.D.	0 (1)	20
Nickel	105	105	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	103	103	75-125	0	20	N.D.	N.D.	0 (1)	20
Silver	96	96	75-125	1	20	N.D.	N.D.	0 (1)	20
Vanadium	99	99	90-117	0	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

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

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1430029 Sample # 7256555-70
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> Site Address: <u>Mayflower, AR</u> ExxonMobil PM: <u>Scott Bushroe</u> Cost Center/AFE: Consultant/Office: <u>ARCADIS</u> Consultant PM: <u>Steve Barrick</u> Consultant Phone #: <u>919-302-6799</u> Sampler: <u>Ryan Lewis / Clement Papafits</u>				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil <input type="checkbox"/>	Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/>	Air <input type="checkbox"/>	Preservation Code							SCR#: _____ Preservation Codes: H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other																																																																																
Sample Identification: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sample ID</th> <th colspan="2">Collected</th> <th rowspan="2">Grab</th> <th rowspan="2">Composite</th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr><td>WS-018 (surface)</td><td>102913</td><td>10-29-13 0840</td><td>X</td><td></td></tr> <tr><td>WS-003 (surface)</td><td>102913</td><td>10-29-13 0900</td><td>X</td><td></td></tr> <tr><td>WS-007 (0.5-1.0)</td><td>102913</td><td>10-29-13 0920</td><td>X</td><td></td></tr> <tr><td>WS-001 (0.5-1.0)</td><td>102913</td><td>10-29-13 0930</td><td>X</td><td></td></tr> <tr><td>WS-005 (surface)</td><td>102913</td><td>10-29-13 0950</td><td>X</td><td></td></tr> <tr><td>WS-014 (1.5-2.0)</td><td>102913</td><td>10-29-13 1040</td><td>X</td><td></td></tr> <tr><td>WS-014 (5.5-6.0)</td><td>102913</td><td>10-29-13 1050</td><td>X</td><td></td></tr> <tr><td>WS-012 (1.5-2.0)</td><td>102913</td><td>10-29-13 1100</td><td>X</td><td></td></tr> <tr><td>WS-012 (5.0-5.9)</td><td>102913</td><td>10-29-13 1110</td><td>X</td><td></td></tr> <tr><td>WS-010 (1.5-2.0)</td><td>102913</td><td>10-29-13 1130</td><td>X</td><td></td></tr> <tr><td>WS-006 (0.5-1.0)</td><td>102913</td><td>10-29-13 1230</td><td>X</td><td></td></tr> <tr><td>WS-006 (0.5-1.0)</td><td>102913</td><td>NS/NPD</td><td>X</td><td></td></tr> </tbody> </table>							Sample ID	Collected		Grab	Composite	Date	Time	WS-018 (surface)	102913	10-29-13 0840	X		WS-003 (surface)	102913	10-29-13 0900	X		WS-007 (0.5-1.0)	102913	10-29-13 0920	X		WS-001 (0.5-1.0)	102913	10-29-13 0930	X		WS-005 (surface)	102913	10-29-13 0950	X		WS-014 (1.5-2.0)	102913	10-29-13 1040	X		WS-014 (5.5-6.0)	102913	10-29-13 1050	X		WS-012 (1.5-2.0)	102913	10-29-13 1100	X		WS-012 (5.0-5.9)	102913	10-29-13 1110	X		WS-010 (1.5-2.0)	102913	10-29-13 1130	X		WS-006 (0.5-1.0)	102913	10-29-13 1230	X		WS-006 (0.5-1.0)	102913	NS/NPD	X		Total # of Containers: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>VOCs</td><td>8260B</td><td>PAH</td><td>8270 SIM</td><td>RCRA Metals</td><td>Diss Metals</td><td>HEM Oil & Grease</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td> </tr> </table>	VOCs	8260B	PAH	8270 SIM	RCRA Metals	Diss Metals	HEM Oil & Grease	X	X	X	X	X	X	X	H <input type="checkbox"/> N <input type="checkbox"/> P <input type="checkbox"/>					
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X	X	X	X	X	X	X																																																																																								
Turnaround Time Requested (TAT) (please circle) <table style="width: 100%;"> <tr> <td>Standard</td> <td><u>5 day</u></td> <td>4 day</td> </tr> <tr> <td>72 hour</td> <td>48 hour</td> <td>24 hour</td> </tr> </table>				Standard	<u>5 day</u>	4 day	72 hour	48 hour	24 hour	Relinquished by: <u>[Signature]</u> Date: <u>10-29-13</u> Time: <u>1600</u>			Received by: _____ Date: _____ Time: _____																																																																																	
Standard	<u>5 day</u>	4 day																																																																																												
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Data Package (circle if required): Type I - Full _____ Type VI (Raw Data) _____ NJ Reduced _____ Other _____				Relinquished by Commercial Carrier: UPS <input checked="" type="checkbox"/> FedEx _____ Other _____			Received by: <u>[Signature]</u> Date: <u>10/30/13</u> Time: <u>0920</u>																																																																																							
EDD (circle if required): Locus EIM (default) _____ Other _____				Temperature Upon Receipt: <u>0.3-2.5 °C</u>			Custody Seals Intact? <u>(Yes)</u> No																																																																																							

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only
Group # 1430029 Sample # 7256555-70
Instructions on reverse side correspond with circled numbers.

1 Client Information				4 Matrix				5 Analyses Requested										6 Remarks																																																																						
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ExxonMobil PM <u>Scott Bushroe</u>		Cost Center/AFE		Total # of Containers 9 7 2				VOCs 8260B PAH 8270SM RCRA Metals Ni, V, Mg, Ca Diss Metals HEM Oil & Grease										Lab to filter and preserve diss metals upon receipt																																																																						
Consultant/Office <u>ARCADIS</u>		Consultant Phone # <u>919-302-6799</u>																																																																																						
Consultant PM <u>Steve Barnick</u>		Sampler <u>Ryan Lewis / Clement Papafio</u>		3 Grab Composite <input type="checkbox"/> Soil <input type="checkbox"/> Water <input type="checkbox"/> Oil																																																																																				
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<u>WS-002(Surface) 102913</u>		<u>10-29-13</u>	<u>1320</u>	<input checked="" type="checkbox"/>																																																																																				
<u>WS-EB-106-102913</u>		<u>10-29-13</u>	<u>1400</u>	<input checked="" type="checkbox"/>																																																																																				
<u>WS-TB-189-102913</u>		<u>10-29-13</u>	<u>---</u>	<input checked="" type="checkbox"/>																																																																																				
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>[Signature]</u>		Date <u>10-29-13</u>		Time <u>1600</u>		Received by <u>[Signature]</u>		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		EDD (circle if required)		UPS <input checked="" type="checkbox"/>		FedEx		Other		<u>[Signature]</u>		<u>10/30/13</u>		<u>0920</u>																																																																										
Type VI (Raw Data)		Locus EIM (default)		Temperature Upon Receipt <u>0.3-2.5°C</u>		Custody Seals Intact?		<u>Yes</u>		No																																																																														
NJ Reduced		Other																																																																																						
Other																																																																																								

Kathy Klinefelter14739, 1430029, 7256555-70

From: Lewis, Ryan [Ryan.Lewis@arcadis-us.com]
Sent: Tuesday, October 29, 2013 8:39 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; Quartey-Papafio, Clement
Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie
Subject: Mayflower Surface water sampling COCs/tracking numbers 102913
Attachments: UPS Tracking Numbers 10.29.2013.pdf; Surface Water COCs 10.29.2013.pdf

Hello All,

Included are the COC's and tracking numbers for today's surface water sampling event. The sampling device failed during sampling at depth. The second depth sample at WS-010 and both samples at WS-011 were unable to be sampled. A new sampling device is in transit.

Thanks,

Ryan B Lewis | Geologist 1 | ryan.lewis@arcadis-us.com

ARCADIS U.S., Inc. | 111 SW Columbia Street, Suite 670 | Portland, OR 97201
T: 503 220 8201 ext. 1101 | M: 503 863 9060
www.arcadis-us.com

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10/31/2013

Environmental Sample Administration 1430029
Receipt Documentation Log

Client/Project: Mayflower
Date of Receipt: 10/30/13
Time of Receipt: 0920
Source Code: 60-1

Shipping Container Sealed: YES NO

Custody Seal Present * : YES NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: Chilled Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT146	2.0	TB	WI	Y	B	
2	↓	2.1	↓	↓	↓	↓	
3		2.5					
4		0.6					
5		0.4					
6		0.3					

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: C. Esler 3647 Date/Time: 10/30/13 1002

Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

- 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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