

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

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

September 20, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/17/2013
Group Number: 1419286
SDG: PEL54
PO Number: B0086003.1301
State of Sample Origin: AR

<u>Client Sample Description</u>	<u>Lancaster Labs (LL) #</u>
WS-014(1.5-2.0)091613 Filt Grab Surface Water	7200051
WS-014(5.5-6.0)091613 Filt Grab Surface Water	7200052
WS-012(1.5-2.0)091613 Filt Grab Surface Water	7200053
WS-012(5.0-5.5)091613 Filt Grab Surface Water	7200054
WS-010(1.5-2.0)091613 Filt Grab Surface Water	7200055
WS-010(3.5-4.0)091613 Filt Grab Surface Water	7200056
WS-006(0.5-1.0)091613 Filt Grab Surface Water	7200057
WS-005(Surface)091613 Filt Grab Surface Water	7200058
WS-002(Surface)091613 Filt Grab Surface Water	7200059
WS-011(1.5-2.0)091613 Filt Grab Surface Water	7200060
WS-011(5.0-5.5)091613 Filt Grab Surface Water	7200061
WS-018(Surface)091613 Filt Grab Surface Water	7200062
WS-003(Surface)091613 Filt Grab Surface Water	7200063
WS-007(0.5-1.0)091613 Filt Grab Surface Water	7200064
WS-001(0.5-1.0)091613 Filt Grab Surface Water	7200065
WS-EB-63-091613 Filt Grab Water	7200066
DUP-WS-88-091613 Filt Grab Surface Water	7200067

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

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

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LLI Group #: 1419286

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 not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: WS-014(1.5-2.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200051
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 08:45 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1614F SDG#: PEL54-01

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	0.0150	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	132601848007	09/20/2013 05:45	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 05:45	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200052
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 08:55 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

16F14 SDG#: PEL54-02

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	0.0158	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	132601848007	09/20/2013 05:49	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 05:49	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200053
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 09:10 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1612F SDG#: PEL54-03

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

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:01	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:20	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200054
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 09:20 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

16F12 SDG#: PEL54-04

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	0.0253	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	132601848007	09/20/2013 06:05	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:05	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:22	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

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Sample Description: WS-010(1.5-2.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200055
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 09:30 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1610F SDG#: PEL54-05

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	0.0227	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	132601848007	09/20/2013 06:08	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:08	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:25	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200056
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 09:40 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

16F10 SDG#: PEL54-06

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	0.0233	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		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	132601848007	09/20/2013 06:12	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:12	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:27	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200057
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 09:50 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1606F SDG#: PEL54-07

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	0.0204	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	132601848007	09/20/2013 05:23	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 05:23	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:29	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-005 (Surface) 091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200058
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 10:25 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1605F SDG#: PEL54-08

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	0.0179	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	132601848007	09/20/2013 06:16	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:16	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-002 (Surface) 091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200059
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 10:40 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1602F SDG#: PEL54-09

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	0.0206	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	132601848007	09/20/2013 06:20	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:20	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200060
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 10:50 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1611F SDG#: PEL54-10

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	0.0203	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:24	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:45	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200061
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 11:00 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

16F11 SDG#: PEL54-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0212	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	132601848007	09/20/2013 06:27	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:27	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:47	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

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Sample Description: WS-018 (Surface) 091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200062
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 11:20 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1618F SDG#: PEL54-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved			mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0388	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	132601848007	09/20/2013 06:31	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:31	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

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Sample Description: WS-003 (Surface) 091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200063
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 11:30 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1603F SDG#: PEL54-13

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	0.0198	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	132601848007	09/20/2013 06:35	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:35	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200064
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 11:50 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1607F SDG#: PEL54-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0219	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.0015 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	132601848007	09/20/2013 06:47	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:47	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200065
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 12:00 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1601F SDG#: PEL54-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0180	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	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	132601848007	09/20/2013 06:50	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:50	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 08:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: **WS-EB-63-091613 Filt Grab Water**
Mayflower, AR
Pipeline Incident

LL Sample # **WW 7200066**
 LL Group # **1419286**
 Account # **14739**

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

Collected: 09/16/2013 13:00 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1659F SDG#: PEL54-16EB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0027 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	132601848007	09/20/2013 06:54	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:54	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 09:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	Nelli S Markaryan	1

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

Sample Description: DUP-WS-88-091613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7200067
LL Group # 1419286
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/16/2013 by DD

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

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 08:10

1686F SDG#: PEL54-17FD*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
	SW-846 6010B		mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0196	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132601848007	09/20/2013 06:58	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132605713008	09/19/2013 09:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132601848007	09/18/2013 10:47	James L Mertz	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132605713008	09/18/2013 16:10	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: 09/20/13 at 08:10 AM

Group Number: 1419286

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: 132601848007	Sample number(s): 7200051-7200067								
Arsenic	N.D.	0.0068	0.0200	mg/l	101		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	99		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	102		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	98		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	104		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	105		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	99		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	100		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	100		90-110		
Batch number: 132605713008	Sample number(s): 7200051-7200067								
Mercury	N.D.	0.00006	0.00020	mg/l	94		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: 132601848007	Sample number(s): 7200051-7200067 UNSPK: 7200057 BKG: 7200057								
Arsenic	103	104	81-123	1	20	N.D.	N.D.	0 (1)	20
Barium	101	103	78-118	2	20	0.0204	0.0203	0 (1)	20
Cadmium	102	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	100	101	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	104	105	75-125	0	20	N.D.	N.D.	0 (1)	20
Nickel	105	105	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	99	100	75-125	1	20	N.D.	N.D.	0 (1)	20
Silver	103	103	75-125	0	20	N.D.	N.D.	0 (1)	20
Vanadium	102	103	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132605713008	Sample number(s): 7200051-7200067 UNSPK: 7200059 BKG: 7200059								
Mercury	86	85	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
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1419286

Sample # 7200051-67

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> Consultant/Office <u>ARCADIS</u> Consultant PM <u>Steve Barrick</u> Consultant Phone # <u>919-302-6799</u> Sampler <u>DAVID DOST / HANS VAN ALLER</u>				Sediment <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/> Oil <input type="checkbox"/> Total # of Containers <u>9</u>				Preservation Code H I N Z H <u>VOCs 826013</u> <u>PAH 8270 51M</u> <u>RCEA Metals + Ni, V, Cr, Pb</u> <u>Diss. Metals</u> <u>NEM Oil & Grease</u>								SCR#: _____ Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other		
2 Sample Identification		Collected		3 Grab	Composite	Soil	Water	Oil	Total # of Containers	Analyses Requested								Remarks
Date	Time	Soil	Water							Oil	H	I	N	Z	H			
WS-014 (1.5-2.0)	091613	9.16.13	0845	X			X		9	X	X	X	X	X				
WS-014 (5.5-6.0)	091613		0855	X			X		9	X	X	X	X	X				
WS-012 (1.5-2.0)	091613		0910	X			X		9	X	X	X	X	X				
WS-012 (5.0-5.5)	091613		0920	X			X		9	X	X	X	X	X				
WS-010 (1.5-2.0)	091613		0930	X			X		9	X	X	X	X	X				
WS-010 (3.5-4.0)	091613		0940	X			X		9	X	X	X	X	X				
WS-006 (0.5-1.0)	091613		0950	X			X		9	X	X	X	X	X				
WS-005 (Surface)	091613		1025	X			X		9	X	X	X	X	X				
WS-002 (Surface)	091613		1040	X			X		9	X	X	X	X	X				
WS-011 (1.5-2.0)	091613		1050	X			X		9	X	X	X	X	X				
WS-011 (5.0-5.5)	091613		1100	X			X		9	X	X	X	X	X				
WS-018 (Surface)	091613		1120	X			X		9	X	X	X	X	X				

7 Turnaround Time Requested (TAT) (please circle)		Relinquished by		Date	Time	Received by		Date	Time
Standard	<u>5 day</u>	4 day	<u>J. J. [Signature]</u>	<u>9.16.13</u>	<u>1500</u>				
72 hour	48 hour	24 hour							
8 Data Package (circle if required)		EDD (circle if required)		Relinquished by Commercial Carrier		Received by		Date	Time
Type I - Full	Type VI (Raw Data)	NJ Reduced	Other	UPS <input checked="" type="checkbox"/>	FedEx	Other	<u>[Signature]</u>	<u>9/17/13</u>	<u>0905</u>
Temperature Upon Receipt <u>05-1.8 °C</u>						Custody Seals Intact? <u>Yes</u> No			

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ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only
Group # 1419286 Sample # 7200051-67
Instructions on reverse side correspond with circled numbers.

2 of 2

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks	
Facility #/SID <u>MAYFLOWER PIPELINE INCIDENT</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/> NPDES <input type="checkbox"/> Air				Preservation Code													
Site Address <u>MAYFLOWER AR</u>				Total # of Containers				VOCs 8260B PAH 8270 SIM PCBs RECA Metals + Ni, V, Cr, Pb Diss. Metals HEM Oil & Grease												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
ExxonMobil PM <u>SCOTT BUSHROE</u>		Cost Center/AFE		Soil				Water				Oil				Total # of Containers				9	
Consultant/Office <u>ARCADIS</u>		Consultant Phone # <u>919-302-6799</u>		Composite				Grab				Total # of Containers									
Consultant PM <u>STEVE BARRICK</u>		Sampler <u>DAVID DOST / HANS VAN ALLER</u>		Sample Identification				Date				Time				Total # of Containers					
Date		Time		Grab				Composite				Total # of Containers									
WS-003 (Surface)		09/16/13		9.16.13				1130				X				X				X	
WS-007 (0.5-1.0)		09/16/13		↓				1150				X				X				X	
WS-001 (0.5-1.0)		09/16/13		↓				1200				X				X				X	
WS-EB-63		09/16/13		↓				1300				X				X				X	
Dup-WS-88		09/16/13		↓				---				X				X				X	
WS-TB-152		09/16/13		↓				---				X				X				X	

7 Turnaround Time Requested (TAT) (please circle)			Relinquished by <u>D. Dost</u>		Date <u>9.16.13</u>		Time <u>1500</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 <u>X</u> FedEx _____ Other _____		Date		Time		<u>Cash</u>		<u>9/17/13</u>		<u>0905</u>	
Type VI (Raw Data)			Temperature Upon Receipt <u>05-18°C</u>		Date		Time		Custody Seals Intact?		<u>Yes</u>		No	
NJ Reduced			EDD (circle if required)		Date		Time		Received by		Date		Time	
Other _____			Locus EIM (default)		Date		Time		Received by		Date		Time	
Other _____			Other _____		Date		Time		Received by		Date		Time	

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

Rachel L. Kreamer A# 14739 Gr# 1419286 Sample 7200057-67

From: Mott, Lyndi [Lyndi.Mott@arcadis-us.com]
Sent: Tuesday, September 17, 2013 5:57 PM
To: Rachel L. Kreamer
Subject: RE: Collection time question

Rachel,

The collection time of 1100 for WS-011(5.0-5.5)091613 is correct.

Lyndi Mott

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

From: Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]
Sent: Tuesday, September 17, 2013 4:14 PM
To: Mott, Lyndi
Subject: Collection time question

Lyndi,

WS-011(5.0-5.5)091613 has a collection time of 1100 on the chain, 1050 on the labels. I'm guessing 1100 is correct, but wanted to be sure.

Thanks
Rachel

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

From: 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]
Sent: Tuesday, September 17, 2013 5:10 PM
To: Rachel L. Kreamer
Subject:

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

Scan Date: 09.17.2013 17:09:46 (-0400)
Queries to: 39Scanner@lancasterlabs.com

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Environmental Sample Administration 1419286
Receipt Documentation Log

Client/Project: Mayflower Water
Date of Receipt: 9/17/13
Time of Receipt: 0905
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	DT131	1.8	TB	WI	Y	B	
2		0.7					
3		1.2					
4		0.8					
5		0.5					
6		0.8					

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

Paperwork Discrepancy/Unpacking Problems:

WS-011 (5.0 - 5.5) 09/16/13 collection time = 1050

Unpacker Signature/Emp#: Cash 3647 Date/Time: 9/17/13 0950

Explanation of Symbols and Abbreviations

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

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

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

> greater than

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

ppb parts per billion

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

Inorganic Qualifiers

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

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

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

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

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

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