

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 13, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 09/10/2013

Group Number: 1417566

SDG: PEL39

PO Number: B0086003.1301

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

WS-014(1.5-2.0)090913 Filt Grab Surface Water	7191428
WS-014(5.5-6.0)090913 Filt Grab Surface Water	7191429
WS-012(1.5-2.0)090913 Filt Grab Surface Water	7191430
WS-012(5.0-5.5)090913 Filt Grab Surface Water	7191431
WS-010(1.5-2.0)090913 Filt Grab Surface Water	7191432
WS-010(3.5-4.0)090913 Filt Grab Surface Water	7191433
WS-006(0.5-1.0)090913 Filt Grab Surface Water	7191434
WS-006(0.5-1.0)090913MS Filt Grab Surface Water	7191435
WS-006(0.5-1.0)090913MSD Filt Grab Surface Water	7191436
WS-006(0.5-1.0)090913DUP Filt Grab Surface Water	7191437
WS-005(Surface)090913 Filt Grab Surface Water	7191438
WS-002(Surface)090913 Filt Grab Surface Water	7191439
WS-011(1.5-2.0)090913 Filt Grab Surface Water	7191440
WS-011(5.0-5.5)090913 Filt Grab Surface Water	7191441
WS-018(Surface)090913 Filt Grab Surface Water	7191442
WS-003(Surface)090913 Filt Grab Surface Water	7191443
WS-007(0.5-1.0)090913 Filt Grab Surface Water	7191444
WS-001(0.5-1.0)090913 Filt Grab Surface Water	7191445
WS-EB-56-090913 Filt Grab Water	7191446

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

ELECTRONIC ARCADIS

COPY TO

Attn: Stephen Barrick

ELECTRONIC ARCADIS

COPY TO

Attn: Lyndi Mott

ELECTRONIC ExxonMobil

Attn: Michael J. Firth

COPY TO		
ELECTRONIC	ARCADIS	Attn: Emily Leamer
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ELECTRONIC	ARCADIS	Attn: Rhiannon Parmalee
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ELECTRONIC	ARCADIS	Attn: Jamie Pritchard
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ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
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 #: 1417566

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set

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

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

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

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: WS-014(1.5-2.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191428
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:40 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0914F SDG#: PEL39-01

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	0.0068 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0094	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	132541848001	09/12/2013 16:44	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/13/2013 10:37	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:44	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-014(5.5-6.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191429
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 08:50 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

09F14 SDG#: PEL39-02

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	0.0089 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0096	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	132541848001	09/12/2013 16:48	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/13/2013 10:40	Eric L Eby	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-012(1.5-2.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191430
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0912F SDG#: PEL39-03

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	0.0155	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	132541848001	09/12/2013 17:00	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:00	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-012(5.0-5.5)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191431
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

09F12 SDG#: PEL39-04

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	0.0077 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.194	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	132541848001	09/12/2013 17:04	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:04	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-010(1.5-2.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191432
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0910F SDG#: PEL39-05

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	0.0141	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	132541848001	09/12/2013 17:08	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:08	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-010(3.5-4.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191433
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

09F10 SDG#: PEL39-06

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	0.0083 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0275	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	132541848001	09/12/2013 17:12	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:12	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191434
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0906F SDG#: PEL39-07BKG

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	0.0265	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	132541848001	09/12/2013 16:20	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:20	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:43	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)090913MS Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191435
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0906F SDG#: PEL39-07MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals Dissolved						
07035	Arsenic	7440-38-2	0.159	0.0068	0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0512	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.204	0.0016	0.0150	1
07055	Lead	7439-92-1	0.153	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.529	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.149	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0448	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.512	0.0020	0.0050	1
SW-846 6010B						
00259	Mercury	7439-97-6	0.0011	0.000060	0.00020	1
SW-846 7470A						

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	132541848001	09/12/2013 16:32	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:32	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:51	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)090913MSD Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191436
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0906F SDG#: PEL39-07MSD

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	0.158	0.0068	0.0200	1
07046	Barium	7440-39-3	2.10	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0512	0.00076	0.0050	1
07051	Chromium	7440-47-3	0.205	0.0016	0.0150	1
07055	Lead	7439-92-1	0.150	0.0047	0.0150	1
07061	Nickel	7440-02-0	0.525	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.152	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0458	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.515	0.0020	0.0050	1
		SW-846 7470A	mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	0.0011	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:36	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-006(0.5-1.0)090913DUP Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191437
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0906F SDG#: PEL39-07DUP

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	0.0258	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	132541848001	09/12/2013 16:28	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 16:28	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:49	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-005(Surface)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191438
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:15 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0905F SDG#: PEL39-08

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	0.0539	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	132541848001	09/12/2013 17:16	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:16	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-002(Surface)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191439
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:45 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0902F SDG#: PEL39-09

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	0.0109	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	132541848001	09/12/2013 17:20	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:20	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 07:58	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-011(1.5-2.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191440
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 10:55 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0911F SDG#: PEL39-10

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	0.0086 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0090	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	132541848001	09/12/2013 17:24	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:24	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:00	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-011(5.0-5.5)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191441
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:05 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

09F11 SDG#: PEL39-11

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	0.0115	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	132541848001	09/12/2013 17:28	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:28	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:02	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-018(Surface)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191442
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 11:25 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0918F SDG#: PEL39-12

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	0.0586	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	132541848001	09/12/2013 17:32	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:32	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:04	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-003(Surface)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191443
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

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

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0903F SDG#: PEL39-13

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	0.0070 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0266	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	132541848001	09/12/2013 17:36	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:36	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:06	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-007(0.5-1.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191444
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:05 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0907F SDG#: PEL39-14

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	0.0123	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	132541848001	09/12/2013 17:48	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:48	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:08	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-001(0.5-1.0)090913 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191445
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:15 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0901F SDG#: PEL39-15

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	0.0082 J	0.0068	0.0200	1
07046	Barium	7440-39-3	0.0768	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	132541848001	09/12/2013 17:52	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:52	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:14	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Sample Description: WS-EB-56-090913 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7191446
LL Group # 1417566
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 09/09/2013 12:45 by DD

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

Submitted: 09/10/2013 09:35

Reported: 09/13/2013 12:18

0956F SDG#: PEL39-16EB*

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	0.0014 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	132541848001	09/12/2013 17:56	John P Hook	1
07046	Barium	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07049	Cadmium	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07051	Chromium	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07055	Lead	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07061	Nickel	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07036	Selenium	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07066	Silver	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
07071	Vanadium	SW-846 6010B	1	132541848001	09/12/2013 17:56	John P Hook	1
00259	Mercury	SW-846 7470A	1	132545713003	09/13/2013 08:16	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132541848001	09/11/2013 23:45	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132545713003	09/12/2013 05:25	Damary Valentin	1

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

Quality Control SummaryClient Name: ExxonMobil c/o Arcadis
Reported: 09/13/13 at 12:18 PM

Group Number: 1417566

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: 132541848001	Sample number(s): 7191428-7191446								
Arsenic	N.D.	0.0068	0.0200	mg/l	102		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	103		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	103		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	103		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	103		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	98		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	93		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	103		90-110		
Batch number: 132545713003	Sample number(s): 7191428-7191446								
Mercury	N.D.	0.00006	0.00020	mg/l	110		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: 132541848001	Sample number(s): 7191428-7191446 UNSPK: 7191434 BKG: 7191434								
Arsenic	106	105	81-123	0	20	N.D.	N.D.	0 (1)	20
Barium	104	104	78-118	0	20	0.0265	0.0258	3	20
Cadmium	102	102	83-116	0	20	N.D.	N.D.	0 (1)	20
Chromium	102	103	81-120	1	20	N.D.	N.D.	0 (1)	20
Lead	102	100	75-125	2	20	N.D.	N.D.	0 (1)	20
Nickel	106	105	86-115	1	20	N.D.	N.D.	0 (1)	20
Selenium	100	102	75-125	2	20	N.D.	N.D.	0 (1)	20
Silver	90	92	75-125	2	20	N.D.	N.D.	0 (1)	20
Vanadium	102	103	90-111	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132545713003	Sample number(s): 7191428-7191446 UNSPK: 7191434 BKG: 7191434								
Mercury	109	105	80-120	3	20	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

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

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only
Group # 1417566 Sample # 7191428-46
Instructions on reverse side correspond with circled numbers.

1 of 2

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

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

Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only
Group # 1417566 Sample # 7191428-46
Instructions on reverse side correspond with circled numbers.

For Eurofins Lancaster Laboratories Environmental use only

Group # 1417566 Sample # 7191428-46

Instructions on reverse side correspond with circled numbers

SCR#: 2 of 2

Rachel L. Kreamer

A# 14739, Gr# 1417566, Sample# 7191428-46

From: Mott, Lyndi [Lyndi.Mott@arcadis-us.com]
Sent: Wednesday, September 11, 2013 9:52 AM
To: Rachel L. Kreamer
Cc: Kathy Klinefelter
Subject: RE: One surface water cooler temp from 9/10

Yes, please proceed with the analyses.

Thank you,

Lyndi Mott | Project Chemistry/Data Quality Specialist | lyndi.mott@arcadis-us.com ARCADIS U.S., Inc. | 2929 Briarpark Drive | Suite 300 | Houston, TX 77042 T. 713.953.4829 | T. 832.534.8140 | M. 315.569.9448 www.arcadis-us.com ARCADIS, Imagine the result Please consider the environment before printing this email.

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

From: Rachel L. Kreamer [mailto:RKreamer@lancasterlabs.com]
Sent: Wednesday, September 11, 2013 8:46 AM
To: Mott, Lyndi
Cc: Kathy Klinefelter
Subject: One surfact water cooler temp from 9/10

Lyndi,

While auditing the surface water paperwork from yesterday's samples I noticed that one of the cooler temperatures was 7.1. The unpacker included notes on the doc log, which is attached. Surface temps of bottles from the four corners and the center of the cooler were taken and these were all well below 6C. Should we go ahead with the analyses?

Thanks
Rachel

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

From: 39Scanner@lancasterlabs.com [mailto:39Scanner@lancasterlabs.com]
Sent: Wednesday, September 11, 2013 9:40 AM
To: Rachel L. Kreamer
Subject:

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

Scan Date: 09.11.2013 09:39:47 (-0400)
Queries to: 39Scanner@lancasterlabs.com

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Environmental Sample Administration 1417566
Receipt Documentation LogClient/Project: Exxon mobilShipping Container Sealed: YES NODate of Receipt: 9-10-13Custody Seal Present * : YES NOTime of Receipt: 935

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

Source Code: 60-1Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	ST 8013596 Comments
1	DH46	1.7	TB	WI	Y	B	
2	↓	2.4	↓	↓	↓	↓	
3	↓	3.0	↓	↓	↓	↓	
4	↓	3.8	↓	↓	↓	B&L	
5	↓	7.1	↓	↓	↓	B&L	1.0 1.0 0.3 1.0 1.0 1.1
6	↓	4.8	↓	↓	↓	B&L	

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

Paperwork Discrepancy/Unpacking Problems:

Cooler #5 cooler had alot of water
very little Ice in bag on side of cooler
away from TB, water was cold, TB was
on top of card Board Divider

Unpacker Signature/Emp#:

Brenely Boney 2299

Date/Time:

9-10-13 11:14

Issued by Dept. 6042 Management

Explanation of Symbols and Abbreviations

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

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

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

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

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

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

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

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

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