ANALYTICAL RESULTS

Prepared by:

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2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

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

October 12, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/07/2013
Group Number: 1424339
SDG: PEL97
PO Number: B0086003.1301
State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-014(1.5-2.0)100613 Filt Grab Surface Water	7227054
WS-014(5.5-6.0)100613 Filt Grab Surface Water	7227055
WS-012(1.5-2.0)100613 Filt Grab Surface Water	7227056
WS-012(5.0-5.5)100613 Filt Grab Surface Water	7227057
WS-010(1.5-2.0)100613 Filt Grab Surface Water	7227058
WS-010(3.5-4.0)100613 Filt Grab Surface Water	7227059
WS-006(0.5-1.0)100613 Filt Grab Surface Water	7227060
WS-005(Surface)100613 Filt Grab Surface Water	7227061
WS-002(Surface)100613 Filt Grab Surface Water	7227062
WS-011(1.5-2.0)100613 Filt Grab Surface Water	7227063
WS-011(5.0-5.5)100613 Filt Grab Surface Water	7227064
WS-018(Surface)100613 Filt Grab Surface Water	7227065
WS-003(Surface)100613 Filt Grab Surface Water	7227066
WS-007(0.5-1.0)100613 Filt Grab Surface Water	7227067
WS-001(0.5-1.0)100613 Filt Grab Surface Water	7227068
DUP-WS-98-100613 Filt Grab Surface Water	7227069
WS-EB-83-100613 Filt Grab Water	7227070

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	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 #: 1424339

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)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227054
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 08:30 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0614F SDG#: PEL97-01

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	0.0232	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	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 12:54	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:26	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:31	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-014(5.5-6.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227055
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 08:40 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

06F14 SDG#: PEL97-02

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	0.0234	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	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 12:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:30	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:33	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-012(1.5-2.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227056
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 08:55 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0612F SDG#: PEL97-03

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	0.0560	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	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:10	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:42	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:35	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-012(5.0-5.5)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227057
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 09:00 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

06F12 SDG#: PEL97-04

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	0.0183	0.00033	0.0050	1
07049	Cadmium	7440-43-9	N.D.	0.00076	0.0050	1
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
07055	Lead	7439-92-1	N.D.	0.0047	0.0150	1
07061	Nickel	7440-02-0	N.D.	0.0015	0.0100	1
07036	Selenium	7782-49-2	N.D.	0.0084	0.0200	1
07066	Silver	7440-22-4	N.D.	0.0021	0.0050	1
07071	Vanadium	7440-62-2	N.D.	0.0020	0.0050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	N.D.	0.000060	0.00020	1

General Sample Comments

This sample was filtered in the lab for dissolved metals.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07035	Arsenic	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:14	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:46	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:37	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-010(1.5-2.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227058
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 09:20 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0610F SDG#: PEL97-05

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	0.0214	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	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:18	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:50	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:39	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-010(3.5-4.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227059
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 09:25 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

06F10 SDG#: PEL97-06

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	0.0213	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	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:22	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:54	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:41	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-006(0.5-1.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227060
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 09:35 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0606F SDG#: PEL97-07

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	0.0190	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	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 12:30	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:53	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-005(Surface)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227061
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 10:00 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0605F SDG#: PEL97-08

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	0.0211	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	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:26	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 22:58	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:55	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-002(Surface)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227062
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 10:40 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0602F SDG#: PEL97-09

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	0.0224	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	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:30	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:02	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:57	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-011(1.5-2.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227063
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 10:25 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0611F SDG#: PEL97-10

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	0.0207	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	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:34	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:06	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 05:59	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-011(5.0-5.5)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227064
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 10:30 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

06F11 SDG#: PEL97-11

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	0.0204	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	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:38	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:10	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:01	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-018(Surface)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227065
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 10:55 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0618F SDG#: PEL97-12

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	0.0368	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	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:42	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:14	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:03	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-003(Surface)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227066
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 11:05 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0603F SDG#: PEL97-13

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	0.0225	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	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:46	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:18	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:05	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-007(0.5-1.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227067
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 11:20 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0607F SDG#: PEL97-14

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	0.0210	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	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 13:58	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:30	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:07	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-001(0.5-1.0)100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227068
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 11:30 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0601F SDG#: PEL97-15

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	0.0212	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	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 14:02	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:33	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:10	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: DUP-WS-98-100613 Filt Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227069
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0698F SDG#: PEL97-16FD

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	0.0193	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	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 14:06	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:37	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:12	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Sample Description: WS-EB-83-100613 Filt Grab Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7227070
LL Group # 1424339
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/06/2013 12:00 by RL

Submitted: 10/07/2013 14:40
Reported: 10/12/2013 05:47

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

0683F SDG#: PEL97-17EB*

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	0.0037 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	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07046	Barium	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07049	Cadmium	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07051	Chromium	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07055	Lead	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07061	Nickel	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07036	Selenium	SW-846 6010B	1	132811848002	10/11/2013 14:10	Katlin N Cataldi	1
07066	Silver	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
07071	Vanadium	SW-846 6010B	1	132811848002	10/10/2013 23:41	John W Yanzuk II	1
00259	Mercury	SW-846 7470A	1	132815713004	10/10/2013 06:18	Damary Valentin	1
01848	WW SW846 ICP Digest (tot rec)	SW-846 3005A	1	132811848002	10/08/2013 23:30	Annamaria Stipkovits	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	132815713004	10/09/2013 15:10	Nelli S Markaryan	1

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

Quality Control Summary

Client Name: ExxonMobil c/o Arcadis Group Number: 1424339
Reported: 10/12/13 at 05:47 AM

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

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 132811848002	Sample number(s): 7227054-7227070								
Arsenic	N.D.	0.0068	0.0200	mg/l	106		90-113		
Barium	N.D.	0.00033	0.0050	mg/l	101		90-110		
Cadmium	N.D.	0.00076	0.0050	mg/l	105		90-112		
Chromium	N.D.	0.0016	0.0150	mg/l	102		90-110		
Lead	N.D.	0.0047	0.0150	mg/l	110		88-110		
Nickel	N.D.	0.0015	0.0100	mg/l	106		90-111		
Selenium	N.D.	0.0084	0.0200	mg/l	106		80-120		
Silver	N.D.	0.0021	0.0050	mg/l	93		80-120		
Vanadium	N.D.	0.0020	0.0050	mg/l	104		90-110		
Batch number: 132815713004	Sample number(s): 7227054-7227070								
Mercury	N.D.	0.00006 0	0.00020	mg/l	101		80-120		

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 132811848002	Sample number(s): 7227054-7227070 UNSPK: 7227060 BKG: 7227060								
Arsenic	109	105	81-123	4	20	N.D.	N.D.	0 (1)	20
Barium	102	101	78-118	0	20	0.0190	0.0190	0 (1)	20
Cadmium	104	103	83-116	1	20	N.D.	N.D.	0 (1)	20
Chromium	103	102	76-120	1	20	N.D.	N.D.	0 (1)	20
Lead	108	110	75-125	2	20	N.D.	N.D.	0 (1)	20
Nickel	105	105	86-115	0	20	N.D.	N.D.	0 (1)	20
Selenium	108	103	75-125	5	20	N.D.	N.D.	0 (1)	20
Silver	95	91	75-125	4	20	N.D.	N.D.	0 (1)	20
Vanadium	105	105	90-117	1	20	N.D.	N.D.	0 (1)	20
Batch number: 132815713004	Sample number(s): 7227054-7227070 UNSPK: 7227059 BKG: 7227059								
Mercury	95	98	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.

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14734 — For Eurofins Lancaster Laboratories Environmental use only — Group # 1424339 — Sample # 7227054-70

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: ARCADIS
Consultant PM: Steve Barrick
Consultant Phone #: 919 302-6799
Sampler: Ryan Lewis / Dave Drost

SCR#:

Preservation Codes

H = HCl, T = Thiosulfate, N = HNO_3, B = NaOH, S = H_2SO_4, O = Other

6 Remarks

Lab to filter and pressure diss. metals upon receipt

2 Sample Identification	Collected Date	Collected Time	3 Grab	Composite	4 Matrix: Soil	Sediment	Potable Water	Ground	NPDES	Surface	Air	Oil	Total # of Containers	5 Analyses Requested: VOCs 8260B (H)	PAH 8270 SIM	RCRA Metals Inorganics Only (N)	Diss Metals (H)	HEM Oil & Grease
WS-005 (Surface) 100513	10-5-2013	1010	X				X						9	X	X	X	X	X
WS-003 (Surface) 100513	10-5-2013	1130	X				X						9	X	X	X	X	X
WS-007 (0.5-1.0) 100513	10-5-2013	1150	X				X						9	X	X	X	X	X
WS-001 (0.5-1.0) 100513	10-5-2013	1200	X				X						9	X	X	X	X	X
WS-EB-82-100513	10-5-2013	1230	X				X						7	X	X	X	X	
WS-014 (1.5-2.0) 100613	10-6-2013	0830	X				X						9	X	X	X	X	X
WS-014 (5.5-6.0) 100613	10-6-2013	0840	X				X						9	X	X	X	X	X
WS-012 (1.5-2.0) 100613	10-6-2013	0855	X				X						9	X	X	X	X	X
WS-012 (5.0-5.5) 100613	10-6-2013	0900	X				X						9	X	X	X	X	X
WS-010 (1.5-2.0) 100613	10-6-2013	0920	X				X						9	X	X	X	X	X
WS-010 (3.5-4.0) 100613	10-6-2013	0925	X				X						9	X	X	X	X	X
WS-006 (0.5-1.0) 100613	10-6-2013	0935	X				X						9	X	X	X	X	X

7 Turnaround Time Requested (TAT) (please circle)

Standard — (5 day) — 4 day — 72 hour — 48 hour — 24 hour

8 Data Package (circle if required)

Type I - Full
Type VI (Raw Data)
NJ Reduced
Other

EDD (circle if required)

Locus EIM (default)
Other

Relinquished by	Date	Time	Received by	Date	Time
	10-6-13	1600			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other Southwest			Received by: Annelise M. Owen	10/7/13	1440

Temperature Upon Receipt 0.4-2.7 °C

Custody Seals Intact? (Yes) No

9

ExxonMobil Analysis Request/Chain of Custody

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Acct. # 14739 For Eurofins Lancaster Laboratories Environmental use only Group # 1424339 Sample # 7227054-70
Instructions on reverse side correspond with circled numbers.

3 of 3

SCR#: _____

1 Client Information

Facility #/SID: Mayflower Pipeline Incident
Site Address: Mayflower, AR
ExxonMobil PM: Scott Bushroe
Cost Center/AFE:
Consultant/Office: ARCADIS
Consultant PM: Steve Barrick
Consultant Phone #: 919-302-6799
Sampler: Ryan Lewis / Dave Drost

4 Matrix

Soil ☐ Sediment ☐ Water ☒ Surface ☒ Ground ☐ Potable ☐ NPDES ☐ Oil ☐ Air ☐

3 Grab / Composite

2 Sample Identification | Collected Date | Collected Time | Grab | Composite | Total # of Containers

Sample Identification	Date	Time	Grab	Composite	Total # of Containers
WS-005 (Surface) 100613	10-6-2013	1000	X		9
WS-002 (Surface) 100613	10-6-2013	1040	X		9
WS-011 (1.5-2.0) 100613	10-6-2013	1025	X		9
WS-011 (5.0-5.5) 100613	10-6-2013	1030	X		9
WS-018 (Surface) 100613	10-6-2013	1055	X		9
WS-003 (Surface) 100613	10-6-2013	1105	X		9
WS-007 (0.5-1.0) 100613	10-6-2013	1120	X		9
WS-001 (0.5-1.0) 100613	10-6-2013	1130	X		9
DUP-WS-98-100613	10-6-2013	—	X		9
WS-EB-83-100613	10-6-2013	1200	X		7
WS-TB-169-100613	10-6-2013	—	X		2

5 Analyses Requested — Preservation Code

VOCs 8260B	PAH 8270 SIM	RCRA Metals + Hg (As, Ba, Cd, Cr, Pb, Se, Ag, Hg)	Diss Metals	HEM Oil & Grease
H		N		H

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

6 Remarks
Lab to filter and pressure diss. metals upon receipt

7 Turnaround Time Requested (TAT) (please circle)
Standard (5 day) 4 day
72 hour 48 hour 24 hour

8 Data Package (circle if required)
Type I - Full
Type VI (Raw Data)
NJ Reduced
Other _____

EDD (circle if required)
Locus EIM (default)
Other _____

Relinquished by	Date	Time	Received by	Date	Time
[signature]	10-6-13	1600			
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by	Date	Time	Received by	Date	Time
Relinquished by Commercial Carrier: UPS ____ FedEx ____ Other Southwest			Received by: Annalisa H. Owen	Date 10/7/13	Time 1440

Temperature Upon Receipt 0.4 2.7 °C

Custody Seals Intact? (Yes) No

9

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G-1424339

Environmental Sample Administration
Receipt Documentation Log

Client/Project: ExxonMobil: Mayflower

Date of Receipt: 10/2/13

Time of Receipt: 1440

Source Code: 01

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.4	TB	WI	Y	B	
2	↓	1.7	↓	↓	↓	↓	
3	↓	0.8	↓	↓	↓	↓	
4	↓	2.7	↓	↓	↓	↓	
5	↓	1.0	↓	↓	↓	↓	
6	↓	2.1	↓	↓	↓	↓	

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Annelise H. Owen/210 **Date/Time:** 10/2/13 1510

Issued by Dept. 6042 Management

2174.06

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G-1424339

Environmental Sample Administration Receipt Documentation Log

Client/Project: Exxon Mobil : Mayflower

Date of Receipt: 10/7/13

Time of Receipt: 1440

Source Code: 01

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
7	DT121	1.8	TB	WI	Y	B	
8	↓	1.2	↓	↓	↓	↓	
9		1.0					
10		1.5					
11		0.4					
12		1.7					

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#: Annelise H. Owen /210 **Date/Time:** 10/7/13 1510

Issued by Dept. 6042 Management

2174.06

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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 ≥ 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 ≥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.