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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 Prepared for:

ExxonMobil PO Box 4592 Houston TX 77210-4592

March 26, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 03/14/2014 Group Number: 1459571 SDG: PEM89 PO Number: 4410181435 Release Number: SIXSMITH State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-007(0.5-1.0)031314 Grab Surface Water	7394403
WS-020(Surface)031314 Grab Surface Water	7394404
WS-009(Surface)031314 Grab Surface Water	7394405
WS-001(0.5-1.0)031314 Grab Surface Water	7394406
WS-021(Surface)031314 Grab Surface Water	7394407
WS-004(0.5-1.0)031314 Grab Surface Water	7394408
WS-011(1.5-2.0)031314 Grab Surface Water	7394409
WS-011(5.5-6.0)031314 Grab Surface Water	7394410
WS-014(1.5-2.0)031314 Grab Surface Water	7394411
WS-014(6.0-6.5)031314 Grab Surface Water	7394412
WS-015(1.5-2.0)031314 Grab Surface Water	7394413
WS-015(4.0-4.5)031314 Grab Surface Water	7394414
WS-012(1.5-2.0)031314 Grab Surface Water	7394415
WS-012(6.0-6.5)031314 Grab Surface Water	7394416
WS-010(1.5-2.0)031314 Grab Surface Water	7394417
WS-010(4.5-5.0)031314 Grab Surface Water	7394418
WS-006(0.5-1.0)031314 Grab Surface Water	7394419
WS-006(0.5-1.0)031314MS Grab Surface Water	7394420
WS-006(0.5-1.0)031314MSD Grab Surface Water	7394421
DUP-WS-128-031314 Grab Surface Water	7394422
WS-EB-131-031314 Grab Water	7394423

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





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Attn: Lyndi Mott Attn: Michael J. Firth Attn: Emily Leamer Attn: Rhiannon Parmalee Attn: Michael L Sixsmith Attn: Julie Foster

Respectfully Submitted,

Katherine a. Klinefelter

Katherine A. Klinefelter Principal Specialist

(717) 556-7256

🔅 eurofins

Lancaster Laboratories Environmental

Project Name: Mayflower, AR Pipeline Incident LLI Group #: 1459571

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:

SW-846 8270C SIM, GC/MS Semivolatiles

<u>Sample #s: 7394404, 7394405</u>

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The client was contacted and the data reported.

Batch #: 14077WAI026 (Sample number(s): 7394403-7394423 UNSPK: 7394419)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7394404, 7394405



Analysis Report

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Sample Description: WS-007(0.5-1.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394403 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 09:30 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8901 SDG#: PEM89-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.012 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.017 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.040 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.048 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.028 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.016 J	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.052	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.015 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.053	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis	Laboratorv	Sample	Analvsis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 21:54	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-020(Surface)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394404 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 10:15 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8902 SDG#: PEM89-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.011 J	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	0.031 J	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1
The :	recovery for the sample surrog	gate(s) is outside	the QC			
acce	ptance limits as noted on the	QC Summary. The	client was			

contacted and the data reported.

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 22:22	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-009(Surface)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394405 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 09:40 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8903 SDG#: PEM89-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1
The :	recovery for the sample surrog	gate(s) is outside	the QC			
acce	ptance limits as noted on the	QC Summary. The	client was			

eptanc

contacted and the data reported.

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 22:49	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-001(0.5-1.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394406 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 09:50 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8904 SDG#: PEM89-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.014 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.016 J	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.015 J	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory	z Sample	Analysis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 23:17	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-021(Surface)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394407 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 09:55 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8905 SDG#: PEM89-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Sample	Analysis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 23:45	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-004(0.5-1.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394408 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 10:00 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8906 SDG#: PEM89-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.014 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis	Record	
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Ti	me	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014	00:13	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014	10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-011(1.5-2.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394409 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 13:25 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8907 SDG#: PEM89-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Samp	le Analy	vsis I	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 00:4	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:0) David S Schrum	1



Analysis Report

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

Sample Description: WS-011(5.5-6.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394410 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 13:30 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8908 SDG#: PEM89-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.013 J	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.046 J	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.011 J	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	0.049 J	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.048 J	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

General Sample Comments

Laboratory Sampl	e Analvsis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Tim	ne	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014	01:09	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014	10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-014(1.5-2.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394411 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:05 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8909 SDG#: PEM89-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

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	Laboratorv	Sample	Analvsis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 02:48	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1

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



Analysis Report

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

Sample Description: WS-014(6.0-6.5)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394412 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:10 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8910 SDG#: PEM89-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

General Sample Comments

Laboratory	Sample	Analysis	Record
Laboracory	Sampre	Anarysis	record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 03:1	6 Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:0	0 David S Schrum	1



Analysis Report

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

Sample Description: WS-015(1.5-2.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394413 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:25 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8911 SDG#: PEM89-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 03:44	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-015(4.0-4.5)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394414 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:30 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8912 SDG#: PEM89-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 04:11	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-012(1.5-2.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394415 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:40 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8913 SDG#: PEM89-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 04:39	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-012(6.0-6.5)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394416 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 14:45 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8914 SDG#: PEM89-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.011 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.025 J	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	0.015 J	0.010	0.051	1

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 05:07	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-010(1.5-2.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394417 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 15:00 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8915 SDG#: PEM89-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 05:35	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-010(4.5-5.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394418 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 15:05 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8916 SDG#: PEM89-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.050	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.050	1
08357	Anthracene	120-12-7	N.D.	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.050	1
08357	Chrysene	218-01-9	N.D.	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.050	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.050	1
08357	Fluorene	86-73-7	N.D.	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.050	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.050	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.050	1
08357	Pyrene	129-00-0	N.D.	0.010	0.050	1

General Sample Comments

Laboratory	Sample	Analysis	Record
Laboracory	Dampre	Anarysis	Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 06:	03 Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:	00 David S Schrum	1



Analysis Report

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

Sample Description: WS-006(0.5-1.0)031314 Grab Surface Water S20135565 Mayflower, AR Pipeline Incident

LL Sample # WW 7394419 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 15:20 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8917 SDG#: PEM89-17BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Sam	ole Ana	lvsis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 17:43	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-006(0.5-1.0)031314MS Grab Surface Water LL Sampl S20135565 Mayflower, AR LL Group Pipeline Incident Account

LL Sample # WW 7394420 LL Group # 1459571 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 15:20 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8917 SDG#: PEM89-17MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.95	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.0	0.010	0.051	1
08357	Anthracene	120-12-7	0.87	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.94	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.76	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.88	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.74	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.79	0.010	0.051	1
08357	Chrysene	218-01-9	0.81	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.75	0.010	0.051	1
08357	Fluoranthene	206-44-0	0.92	0.010	0.051	1
08357	Fluorene	86-73-7	1.0	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.76	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	0.97	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	0.94	0.010	0.051	1
08357	Naphthalene	91-20-3	0.97	0.030	0.051	1
08357	Phenanthrene	85-01-8	0.95	0.030	0.051	1
08357	Pyrene	129-00-0	0.80	0.010	0.051	1

General Sample Comments

Laboratory Sampl	e Analvsis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 18	8:11	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10	0:00	David S Schrum	1



Analysis Report

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

Sample Description: WS-006(0.5-1.0)031314MSD Grab Surface WaterLL Sample # WW 7394421S20135565 Mayflower, ARLL Group # 1459571Pipeline IncidentAccount # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 15:20 by MH

ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8917 SDG#: PEM89-17MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	0.95	0.010	0.050	1
08357	Acenaphthylene	208-96-8	0.99	0.010	0.050	1
08357	Anthracene	120-12-7	0.87	0.010	0.050	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.050	1
08357	Benzo(a)pyrene	50-32-8	0.78	0.010	0.050	1
08357	Benzo(b)fluoranthene	205-99-2	0.91	0.010	0.050	1
08357	Benzo(g,h,i)perylene	191-24-2	0.78	0.010	0.050	1
08357	Benzo(k)fluoranthene	207-08-9	0.82	0.010	0.050	1
08357	Chrysene	218-01-9	0.83	0.010	0.050	1
08357	Dibenz(a,h)anthracene	53-70-3	0.79	0.010	0.050	1
08357	Fluoranthene	206-44-0	0.90	0.010	0.050	1
08357	Fluorene	86-73-7	1.1	0.010	0.050	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.80	0.010	0.050	1
08357	1-Methylnaphthalene	90-12-0	0.97	0.010	0.050	1
08357	2-Methylnaphthalene	91-57-6	0.94	0.010	0.050	1
08357	Naphthalene	91-20-3	0.97	0.030	0.050	1
08357	Phenanthrene	85-01-8	0.96	0.030	0.050	1
08357	Pyrene	129-00-0	0.80	0.010	0.050	1

General Sample Comments

Laboratory Sample Analysis Record	Laboratorv	Sample	Analysis	Record
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CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	1	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/25/2014 18	8:39	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10	0:00	David S Schrum	1



Analysis Report

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

Sample Description:	DUP-WS-128-031314 Grab Surface Water	LL S	Sample	#	WW 7394422
	S20135565 Mayflower, AR		Froup	#	1459571
	Pipeline Incident Ac		ount	#	14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 by MH ExxonMobil PO Box 4592 Houston TX 77210-4592

Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8918 SDG#: PEM89-18FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis Rec

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 06:31	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1



Analysis Report

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Sample Description: WS-EB-131-031314 Grab Water S20135565 Mayflower, AR Pipeline Incident

LL Sample	#	WW 7394423
LL Group	#	1459571
Account	#	14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 03/13/2014 16:10 by	MH
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Submitted: 03/14/2014 09:15 Reported: 03/26/2014 11:38

P8919 SDG#: PEM89-19EB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles SW-846	8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	0.031 J	0.030	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.051	1
08357	Pyrene	129-00-0	N.D.	0.010	0.051	1

ExxonMobil PO Box 4592

Houston TX 77210-4592

General Sample Comments

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

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14077WAI026	03/26/2014 06:58	Brian K Graham	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14077WAI026	03/19/2014 10:00	David S Schrum	1





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Quality Control Summary

Client Name: ExxonMobil Reported: 03/26/14 at 11:38 AM Group Number: 1459571

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 <u>Result</u>	Blank <u>MDL**</u>	Blank <u>LOQ</u>	Report <u>Units</u>	LCS <u>%REC</u>	LCSD <u>%REC</u>	LCS/LCSD <u>Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 14077WAI026	Sample num	uber(s): 7	394403-739	94423					
Acenaphthene	N.D.	0.010	0.050	ug/l	106		83-119		
Acenaphthylene	N.D.	0.010	0.050	ug/l	102		81-130		
Anthracene	N.D.	0.010	0.050	ug/l	102		83-125		
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	103		79-122		
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	99		80-121		
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	111		79-136		
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	102		72-132		
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	100		81-131		
Chrysene	N.D.	0.010	0.050	ug/l	100		84-118		
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	103		66-133		
Fluoranthene	N.D.	0.010	0.050	ug/l	109		84-124		
Fluorene	N.D.	0.010	0.050	ug/l	109		82-119		
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	102		68-132		
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	99		86-130		
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	98		81-131		
Naphthalene	N.D.	0.030	0.050	ug/l	97		82-122		
Phenanthrene	N.D.	0.030	0.050	ug/l	96		83-116		
Pyrene	N.D.	0.010	0.050	ug/l	90		78-125		

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 <u>%REC</u>	MSD <u>%REC</u>	MS/MSD <u>Limits</u>	<u>RPD</u>	RPD <u>MAX</u>	BKG <u>Conc</u>	DUP <u>Conc</u>	DUP <u>RPD</u>	Dup RPD <u>Max</u>
Batch number: 14077WAI026	Sample	number(s)	: 7394403	-73944	23 UNSP	K: 7394419			
Acenaphthene	94	94	60-130	0	30				
Acenaphthylene	98	98	75-132	1	30				
Anthracene	86	86	69-119	0	30				
Benzo(a)anthracene	93	99	37-135	7	30				
Benzo(a)pyrene	75	78	64-123	3	30				
Benzo(b)fluoranthene	87	90	41-137	3	30				
Benzo(g,h,i)perylene	74	78	21-127	5	30				
Benzo(k)fluoranthene	78	81	38-130	4	30				
Chrysene	80	82	58-117	3	30				
Dibenz(a,h)anthracene	74	78	17-134	4	30				
Fluoranthene	90	90	63-129	1	30				
Fluorene	104	104	74-127	0	30				
Indeno(1,2,3-cd)pyrene	75	79	26-130	5	30				

*- 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.



Lancaster Laboratories Environmental

Analysis Report

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Quality Control Summary

Client Name: ExxonMobil Reported: 03/26/14 at 11:38 AM Group Number: 1459571

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

	MS	MSD	MS/MSD		RPD	BKG	DUP	DUP	Dup RPD
<u>Analysis Name</u>	<u>%REC</u>	%REC	Limits	RPD	MAX	Conc	Conc	<u>RPD</u>	<u>Max</u>
1-Methylnaphthalene	96	96	82-133	0	30				
2-Methylnaphthalene	93	94	73-138	0	30				
Naphthalene	96	97	58-131	0	30				
Phenanthrene	94	95	72-126	0	30				
Pyrene	79	80	36-142	0	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

	Name: PAHs in w mber: 14077WAI02		
Daten nu	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene- d10
7394403	103	78	98
7394404	87	46*	89
7394405	85	47*	92
7394406	101	85	99
7394407	109	94	100
7394408	106	93	101
7394409	109	88	96
7394410	102	76	99
7394411	112	94	102
7394412	112	100	103
7394413	111	99	104
7394414	107	95	101
7394415	90	71	99
7394416	104	65	102
7394417	110	96	103
7394418	104	70	96
7394419	107	96	103
7394420	91	91	105
7394421	107	94	106
7394422	106	96	99
7394423	110	102	104
Blank	107	103	104
LCS	107	109	108
MS	91	91	105
MSD	107	94	106
Limits:	59-128	62-141	70-134

*- 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.

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Sample Administration Receipt Documentation Log

Doc Log ID:

9029

Group Number(s): 1459571

Client: <u>ExxonMobil</u>

		Mayflov	wer Pipeline		
	Delive	ery and F	Receipt Information		
Delivery Method:	<u>UPS</u>		Arrival Timestamp:	<u>03/14/2014</u>	<u>9:15</u>
Number of Packages:	<u>1</u>		Number of Projects:	1	
State/Province of Origin:	<u>AR</u>				
	Arr	ival Con	dition Summary		
Shipping Container Sealed:		Yes	Total Trip Blank Qty:		<u>0</u>
Custody Seal Present:		<u>Yes</u>	Trip Blank Type:		<u>NA</u>
Custody Seal Intact:		<u>Yes</u>	Air Quality Samples F	Present:	<u>No</u>
Samples Chilled:		<u>Yes</u>	Air Quality Flow Cont	rollers Present:	<u>N/A</u>
Paperwork Enclosed:		<u>Yes</u>	Flow Controller Quan	tity:	<u>0</u>
Samples Intact:		<u>Yes</u>	Air Quality Returns:		<u>N/A</u>
Missing Samples:		<u>No</u>			
Extra Samples:		<u>No</u>			
Discrepancy in Container Qt	y on COC:	<u>No</u>			
Sample IDs on COC match	Containers:	<u>Yes</u>			
Sample Date/Times match 0	COC:	<u>Yes</u>			
VOA Vial Headspace \geq 6mm	1:	<u>N/A</u>			
VOA IDs (≥6mm):		<u>N/A</u>			

Unpacked by Kristin Zeigler (2123) at 14:26 on 03/14/2014

Samples Chilled Details: Mayflower Pipeline

<u>Cooler #</u>	Thermometer ID	Raw Temp (°C)	Corrected Temp (°C)	Thermometer Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.3	0.3	DT	Wet	Y	Bagged	Ν
2	DT146	1.8	1.8	DT	Wet	Y	Bagged	Ν
	General	Comments:						

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Lancaster Laboratories Environmental

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)
С	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)	Ĺ	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

- A TIC is a possible aldol-condensation product
- B Analyte was also detected in the blank
- C Pesticide result confirmed by GC/MS
- **D** Compound quantitated on a diluted sample
- E Concentration exceeds the calibration range of the instrument
- N Presumptive evidence of a compound (TICs only)
- **P** Concentration difference between primary and confirmation columns >25%
- U Compound was not detected
- X,Y,Z Defined in case narrative

Inorganic Qualifiers

- B Value is <CRDL, but ≥IDL
- **E** Estimated due to interference
- M Duplicate injection precision not met
- **N** Spike sample not within control limits
- **S** Method of standard additions (MSA) used for calculation
- U Compound was not detected
- W Post digestion spike out of control limits
- * Duplicate analysis not within control limits
- + Correlation coefficient for MSA < 0.995

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

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

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

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

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