

Analysis Report

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

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Sample Description: WS-020(Surface)010214 Grab Surface Water

LL Sample # WW 7328368 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 10:30 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01020 SDG#: PEM79-01

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	0.011 J	0.010	0.052	1
08357	Benzo(b) fluoranthene	205-99-2	0.024 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	0.018 J	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	0.014 J	0.010	0.052	1
08357	Chrysene	218-01-9	0.015 J	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	0.011 J	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.018 J	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.018 J	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.052 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.018 J	0.010	0.052	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 02:44	Brian K Graham	1

Sample Description: WS-007(0.5-1.0)010214 Grab Surface Water LL Sample # WW 7328369

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:05 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01007 SDG#: PEM79-02

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-007(0.5-1.0)010214 Grab Surface Water

LL Sample # WW 7328369 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:05 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01007 SDG#: PEM79-02

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.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	0.012 J	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	0.019 J	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	0.023 J	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	0.059	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	0.018 J	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	0.020 J	0.011	0.054	1
08357	Chrysene	218-01-9	0.037 J	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	0.046 J	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.019 J	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	0.037 J	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	0.044 J	0.011	0.054	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 03:11	Brian K Graham	1

Sample Description: WS-009(Surface)010214 Grab Surface Water LL Sample # WW 7328370 Mayflower, AR LL Group # 1443975 Account # 14739

Pipeline Incident

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:20 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01009 SDG#: PEM79-03

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-009(Surface)010214 Grab Surface Water

LL Sample # WW 7328370 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:20 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01009 SDG#: PEM79-03

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	0.012 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	0.013 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	0.040 J	0.031	0.051	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.051	1
08357	Pyrene	129-00-0	0.012 J	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 03:39	Brian K Graham	1

Sample Description: WS-001(0.5-1.0)010214 Grab Surface Water LL Sample # WW 7328371

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:30 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

1--01 SDG#: PEM79-04

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-001(0.5-1.0)010214 Grab Surface Water

LL Sample # WW 7328371 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:30 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

SDG#: PEM79-04 1--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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b) fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.011 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.039 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 04:06	Brian K Graham	1

Sample Description: WS-021(Surface)010214 Grab Surface Water LL Sample # WW 7328372 Mayflower, AR LL Group # 1443975 Account # 14739

Pipeline Incident

Project Name: Mayflower, AR Pipeline Incident by RL

630 Plaza Drive, Suite 600

ExxonMobil c/o Arcadis

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

Collected: 01/02/2014 11:40

1-021 SDG#: PEM79-05

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-021(Surface)010214 Grab Surface Water

LL Sample # WW 7328372 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:40 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

SDG#: PEM79-05 1-021

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	0.015 J	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	0.015 J	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.032 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	0.014 J	0.010	0.052	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 04:34	Brian K Graham	1

Sample Description: WS-004(0.5-1.0)010214 Grab Surface Water LL Sample # WW 7328373

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:50 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01004 SDG#: PEM79-06

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-004(0.5-1.0)010214 Grab Surface Water

LL Sample # WW 7328373 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/02/2014 11:50 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01004 SDG#: PEM79-06

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b)fluoranthene	205-99-2	0.012 J	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	0.013 J	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	0.011 J	0.011	0.053	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 05:02	Brian K Graham	1

Sample Description: WS-011(1.5-2.0)010314 Grab Surface Water LL Sample # WW 7328374

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

SDG#: PEM79-07 01011

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-011(1.5-2.0)010314 Grab Surface Water

LL Sample # WW 7328374 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:00 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01011 SDG#: PEM79-07

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 Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 05:29	Brian K Graham	1

Sample Description: WS-011(5.0-5.5)010314 Grab Surface Water LL Sample # WW 7328375 LL Group # 1443975

Mayflower, AR Pipeline Incident

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Account

14739

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

SDG#: PEM79-08 02011

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-011(5.0-5.5)010314 Grab Surface Water

LL Sample # WW 7328375 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:10 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02011 SDG#: PEM79-08

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.	0.011	0.054	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.054	1
08357	Anthracene	120-12-7	N.D.	0.011	0.054	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.054	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.054	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.011	0.054	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.054	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.054	1
08357	Chrysene	218-01-9	N.D.	0.011	0.054	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.054	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.054	1
08357	Fluorene	86-73-7	N.D.	0.011	0.054	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.054	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.054	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.054	1
08357	Naphthalene	91-20-3	N.D.	0.032	0.054	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.054	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 05:57	Brian K Graham	1

Sample Description: WS-015(1.5-2.0)010314 Grab Surface Water LL Sample # WW 7328376

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:50 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01015 SDG#: PEM79-09

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-015(1.5-2.0)010314 Grab Surface Water

LL Sample # WW 7328376 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 13:50 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01015 SDG#: PEM79-09

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.	0.031	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 Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 06:25	Brian K Graham	1

Sample Description: WS-015(3.5-4.0)010314 Grab Surface Water LL Sample # WW 7328377

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

02015 SDG#: PEM79-10

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-015(3.5-4.0)010314 Grab Surface Water

LL Sample # WW 7328377 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:00 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02015 SDG#: PEM79-10

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	N.D.	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 06:52	Brian K Graham	1

Sample Description: WS-014(1.5-2.0)010314 Grab Surface Water LL Sample # WW 7328378

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

As Received

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01014 SDG#: PEM79-11

As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-014(1.5-2.0)010314 Grab Surface Water

Mayflower, AR Pipeline Incident

LL Sample # WW 7328378 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01014 SDG#: PEM79-11

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

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 07:20	Brian K Graham	1

Sample Description: WS-014(5.5-6.0)010314 Grab Surface Water LL Sample # WW 7328379

Mayflower, AR LL Group # 1443975
Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:20 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

02014 SDG#: PEM79-12

CAT As Received As Received

CAS Number Result As Received Method Limit of Detection Limit* Quantitation Factor

Reference ID: 1443975160114141343



Analysis Report

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14739

Sample Description: WS-014(5.5-6.0)010314 Grab Surface Water

LL Sample # WW 7328379 LL Group # 1443975 Mayflower, AR Pipeline Incident Account

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:20 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02014 SDG#: PEM79-12

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.	0.031	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 Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 07:48	Brian K Graham	1

Sample Description: WS-012(1.5-2.0)010314 Grab Surface Water LL Sample # WW 7328380

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:25 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

As Received

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01012 SDG#: PEM79-13

As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-012(1.5-2.0)010314 Grab Surface Water

LL Sample # WW 7328380 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:25 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01012 SDG#: PEM79-13

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

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 08:15	Brian K Graham	1

Sample Description: WS-012(5.0-5.5)010314 Grab Surface Water LL Sample # WW 7328381

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:35 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

02012 SDG#: PEM79-14

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-012(5.0-5.5)010314 Grab Surface Water

LL Sample # WW 7328381 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:35 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02012 SDG#: PEM79-14

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	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 Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 08:43	Brian K Graham	1

Sample Description: WS-010(1.5-2.0)010314 Grab Surface Water LL Sample # WW 7328382

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:50 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01010 SDG#: PEM79-15

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-010(1.5-2.0)010314 Grab Surface Water

Mayflower, AR Pipeline Incident LL Sample # WW 7328382 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 14:50 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01010 SDG#: PEM79-15

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	N.D.	0.011	0.053	1
08357	Anthracene	120-12-7	N.D.	0.011	0.053	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.011	0.053	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.011	0.053	1
08357	Benzo(b) fluoranthene	205-99-2	N.D.	0.011	0.053	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.011	0.053	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.011	0.053	1
08357	Chrysene	218-01-9	N.D.	0.011	0.053	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.011	0.053	1
08357	Fluoranthene	206-44-0	N.D.	0.011	0.053	1
08357	Fluorene	86-73-7	N.D.	0.011	0.053	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.011	0.053	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.011	0.053	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.011	0.053	1
08357	Naphthalene	91-20-3	0.033 J	0.032	0.053	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.053	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 09:11	Brian K Graham	1

Sample Description: WS-010(3.5-4.0)010314 Grab Surface Water LL Sample # WW 7328383

Mayflower, AR LL Group # 1443975
Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02010 SDG#: PEM79-16

CAT Analysis Name CAS Number Result As Received As Received Limit of Detection Limit* Quantitation Factor

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



Analysis Report

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Sample Description: WS-010(3.5-4.0)010314 Grab Surface Water

Mayflower, AR Pipeline Incident LL Sample # WW 7328383 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

02010 SDG#: PEM79-16

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	0.051	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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 09:38	Brian K Graham	1

Sample Description: WS-006(0.5-1.0)010314 Grab Surface Water LL Sample # WW 7328384

Mayflower, AR LL Group # 1443975 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600

As Received

As Received

Submitted: 01/04/2014 12:50 Highlands Ranch CO 80129

Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17BKG

CAT Analysis Name CAS Number Result Method Limit of Dilution Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-006(0.5-1.0)010314 Grab Surface Water

Mayflower, AR Pipeline Incident LL Sample # WW 7328384 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17BKG

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 Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 01:21	Brian K Graham	1

Sample Description: WS-006(0.5-1.0)010314MS Grab Surface Water LL Sample # WW 7328385

Mayflower, AR LL Group # 1443975
Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17MS

CAT
No. Analysis Name

CAS Number

CAS Number

CAS Number

As Received

Method

Limit of
Detection Limit*

Quantitation
Factor

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



Analysis Report

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Sample Description: WS-006(0.5-1.0)010314MS Grab Surface Water

Mayflower, AR Pipeline Incident

LL Sample # WW 7328385 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17MS

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	1.1	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.2	0.010	0.051	1
08357	Anthracene	120-12-7	0.98	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	1.0	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.83	0.010	0.051	1
08357	Benzo(b) fluoranthene	205-99-2	1.0	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.76	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.93	0.010	0.051	1
08357	Chrysene	218-01-9	0.93	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.76	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	0.010	0.051	1
08357	Fluorene	86-73-7	1.1	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	0.77	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.2	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.2	0.031	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.031	0.051	1
08357	Pyrene	129-00-0	1.2	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 01:48	Brian K Graham	1

Sample Description: WS-006(0.5-1.0)010314MSD Grab Surface Water LL Sample # WW 7328386
Mayflower, AR LL Group # 1443975

Mayflower, AR
Pipeline Incident

LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17MSD

CAT As Received As Received

No. Analysis Name CAS Number Result

As Received Method Limit of Detection Limit* Quantitation Factor

Reference ID: 1443975160114141343



Analysis Report

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Sample Description: WS-006(0.5-1.0)010314MSD Grab Surface Water

Mayflower, AR Pipeline Incident

LL Sample # WW 7328386 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 15:10 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

01006 SDG#: PEM79-17MSD

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	1.0	0.010	0.051	1
08357	Acenaphthylene	208-96-8	1.1	0.010	0.051	1
08357	Anthracene	120-12-7	0.93	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.91	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.79	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.96	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.71	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.89	0.010	0.051	1
08357	Chrysene	218-01-9	0.87	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	0.72	0.010	0.051	1
08357	Fluoranthene	206-44-0	1.1	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	0.72	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	1.1	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	1.1	0.010	0.051	1
08357	Naphthalene	91-20-3	1.1	0.030	0.051	1
08357	Phenanthrene	85-01-8	1.1	0.030	0.051	1
08357	Pyrene	129-00-0	1.1	0.010	0.051	1

General Sample Comments

Laboratory Sample Analysis Record

 CAT
 Analysis
 Name
 Method
 Trial#
 Batch#
 Analysis
 Analyst
 Dilution

 No.
 Date and Time
 Factor

 08357
 PAHs in waters by SIM
 SW-846 8270C SIM
 1
 14006WAA026
 01/08/2014
 02:16
 Brian K Graham
 1

Sample Description: DUP-WS-119-010314 Grab Surface Water

Mayflower, AR Pipeline Incident LL Sample # WW 7328387 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

MAYFD SDG#: PEM79-18FD

CAT Analysis Name CAS Number Result As Received As Received Limit of Dilution Factor

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



Analysis Report

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Sample Description: DUP-WS-119-010314 Grab Surface Water

LL Sample # WW 7328387 LL Group # 1443975 Mayflower, AR Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 by RL ExxonMobil c/o Arcadis

> 630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

MAYFD SDG#: PEM79-18FD

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	0.052	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.052	1
08357	Anthracene	120-12-7	N.D.	0.010	0.052	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.052	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.052	1
08357	Benzo(b) fluoranthene	205-99-2	N.D.	0.010	0.052	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.052	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.052	1
08357	Chrysene	218-01-9	N.D.	0.010	0.052	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.052	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.052	1
08357	Fluorene	86-73-7	N.D.	0.010	0.052	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.052	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.052	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.052	1
08357	Naphthalene	91-20-3	0.031 J	0.031	0.052	1
08357	Phenanthrene	85-01-8	N.D.	0.031	0.052	1
08357	Pyrene	129-00-0	N.D.	0.010	0.052	1

General Sample Comments

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 10:06	Brian K Graham	1

Sample Description: WS-EB-121-010314 Grab Water

Mayflower, AR Pipeline Incident

LL Group # 1443975 Account # 14739

LL Sample # WW 7328388

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 16:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

MAYFE SDG#: PEM79-19EB*

As Received As Received Method Limit of CAT As Received Dilution CAS Number Detection Limit* Quantitation Analysis Name No. Result Factor

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



Analysis Report

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Sample Description: WS-EB-121-010314 Grab Water

Mayflower, AR Pipeline Incident

LL Sample # WW 7328388 LL Group # 1443975 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 01/03/2014 16:00 by RL ExxonMobil c/o Arcadis

630 Plaza Drive, Suite 600 Highlands Ranch CO 80129

Submitted: 01/04/2014 12:50 Reported: 01/16/2014 14:13

MAYFE SDG#: PEM79-19EB*

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	0.15	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

CAT	Analysis Name	Method	Trial#	Batch#	Analysis	Analyst	Dilution
No.					Date and Time		Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14006WAA026	01/08/2014 10:34	Brian K Graham	1

ExxonMobil Analysis Request/Chain of Custody

4.4				
	eu	rof	ins	

Lancaster Laboratories Environmental

For Eurofins Lancaster Laboratories Environmental use only
Group # 1443975 Sample # 23283658
Instructions on reverse side correspond with circled numbers.

- Table	(-	7
(Married Str.)	016	, James

1) Client Info	rmation		4	Matrix			5 Analyses				uest	ed		SCR#			
Facility #/SID	1 . 1. 1								Preser	vation	Code	•					
Maytarer Figeline Site Address.	Incident		-						++		4		<u> </u>			tion Codes	
Maria AR				Ground Surface								ļ			HCI HNO ₃	T = Thiosul B = NaOH	rate
ExxonMobil PM	Cost Center/AFE		1	Ground											H ₂ SO ₄	O = Other	
Scott Bushroe			ے ا	Gra			WIS							6	Ren	narks	
Consultant/Office			Sediment			Containers	۵										
Steve Barrick	Consultant Phone #	-6.799	ľ	Potable	Air	ntai	27										
Sampler Ryan Lewis	1 11 1200		1	Pot			00										
Kyan Lewis		Grab Lime Grab Signature Grap Signat				# of											
	Collecte	Time Q C	۱ _Ξ	Water	_	Total#	A.										
Sample Identification	Date		Soil	⋛	ö	To	-										
WS-020 (Suitace) 010214		030 X		<u> </u>		2	X		$\perp \perp$								
WS-007 (0,5-1.0) 010214		105 X		×		2	X										
WS-009 (suface) 010214		120 X	_	X		2	X						<u> </u>				
WS-001 (0.5-1.0) 010214		130 X	_	X		2	\times										
WS-021 (surface) 010214	1-2-2014 1	140 X		\(\chi\)'		2	X,										
WS-004 (0.5-1.0) 010214	1-2-2014	ISO X		X		2	Xi										
WS-011 (1.5-2.0) D10314	1-3-2014 1	300 X		X		2	X										
WS-011 (S.O-5,5) 010314	1-3-2014 1	310 X		X		2	×										
WS-015(1.5-2.0)010314	1-3-2014 13	350 X		X		2	χ										
WS-015 (3,5-4,0)010314	1-3-2014 14	ta X		X		2	X										
WS-014(1,5-2.0)010314	1-3-2014 1	410 X		*		2	$X^{!}$										
WS-014(5.5-6.0)010314	1-3-2014 1	420 X	9	X		2	X										
7) Turnaround Time Requested (TAT	() (please circle)	Relinquished by	1	1/2		Date	7.1	Time	630	Rece	eived by				Date	Time	@
Standard 5 day	4 day	Relinquished by		1900		Date	-201	Time		Rec	eived\by				Date	Time	
		Relinquisited by		(Daile		1		1,000	Sivedby				Date		
72 hour 48 hour	24 hour	Relinquished by		$\overline{}$		Date		Time)	Rece	eived by	(Date	Time	
8) Data Package (circle if required) ED	D (circle if required)	-		\													
)	cus EIM (default)	Relinquished by Commo	ercial C	arrier						Rece	eived by				Dale	Time	
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ExxonMobil Analysis Request/Chain of Custody

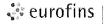
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**Lancaster Laboratories Environmental** 

Acct. # 14739	For Eurofins Lançaster Laboratories Environmental u Group # 1943 475 Sample # 7328
• •	Instructions on reverse side correspond with circled numbers.

es Environmental use only Sample#<u>ヲ378368-88</u>

1) Client Info	Client Information							4) Matrix 5) Analyses R						Requested S						
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# Sample Administration Receipt Documentation Log

Doc Log ID:

1167

6:1443975

Client: Exxon Mobil

**Mayflower Pipeline Incident** 

**Delivery and Receipt Information** 

Delivery Method:

<u>UPS</u>

Arrival Timestamp:

01/04/2014 12:50

Number of Packages:

2

Number of Projects:

1

State/Province of Origin:

<u>AR</u>

**Arrival Condition Summary** 

Shipping Container Sealed:

<u>Yes</u> <u>Yes</u> Trip Blank Present:

Trip Blank Indicated on COC:

<u>No</u>

Custody Seal Intact:

Yes

Trip Blank Type:

<u>N/A</u> <u>N/A</u>

Samples Chilled:

<u>Yes</u>

Trip Blank Qty:

<u>0</u>

Paperwork Enclosed:

Yes

Air Quality Samples Present:

<u>No</u> N/A

Samples Intact: Missing Samples: <u>Yes</u> <u>No</u> Air Quality Flow Controllers Present: Flow Controller Quantity:

Air Quality Returns:

0

<u>N/A</u>

Extra Samples:

<u>No</u>

Discrepancy in Container Qty on COC:

<u>No</u>

Sample IDs on COC match Containers:

<u>Yes</u>

Sample Date/Times match COC:

<u>Yes</u>

VOA Vial Headspace at least 6mm:

<u>N/A</u>

VOA IDs ( $\geq$ 6mm):

N/A

Unpacked by Wesley Miller (2308) at 13:04 on 01/04/2014

## Samples Chilled Details: Mayflower Pipeline Incident

Cooler#	Thermometer ID	Raw Temp (°C)	Corrected Temp (°C)	Thermometer Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	0.3	0.3	DT	Wet	Υ	Bagged	N
2	DT121	0.2	0.2	DT	Wet	Υ	Bagged	N

T | 717-656-2300 F | 717-656-2681 www.LancasterLabs.com



## **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)	L	liter(s)
m3	cubic meter(s)	μL	microliter(s)
		pg/L	picogram/liter

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

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

ppb parts per billion

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

Data Qualifiers:

C - result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

	Organic Qualifiers		Inorganic Qualifiers
Α	TIC is a possible aldol-condensation product	В	Value is <crdl, but="" th="" ≥idl<=""></crdl,>
В	Analyte was also detected in the blank	Ε	Estimated due to interference
С	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
Ε	Concentration exceeds the calibration range of	S	Method of standard additions (MSA) used
	the instrument		for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
Р	Concentration difference between primary and	W	Post digestion spike out of control limits
	confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA < 0.995
X,Y,Z	Defined in case narrative		

### 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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