## Analysis Report

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### ANALYTICAL RESULTS

Prepared by: Prepared for:

Eurofins Lancaster Laboratories Environmental 2425 New Holland Pike Lancaster, PA 17601 ExxonMobil PO Box 4592 Houston TX 77210-4592

July 02, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 06/20/2014 Group Number: 1483436 SDG: PEO06 PO Number: 4410181435 Release Number: SIXSMITH State of Sample Origin: AR

Client Sample Description	Lancaster Labs (LL) #
WS-007(0.5-1.0)061914 Grab Surface Water	7506358
WS-009(Surface)061914 Grab Surface Water	7506359
WS-001(0.5-1.0)061914 Grab Surface Water	7506360
WS-021(Surface)061914 Grab Surface Water	7506361
WS-004(0.5-1.0)061914 Grab Surface Water	7506362

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

ELECTRONIC	ARCADIS	Attn: Stephen Barrick
COPY TO		
ELECTRONIC	ARCADIS	Attn: Lyndi Mott
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Michael J. Firth
COPY TO		
ELECTRONIC	ARCADIS	Attn: Emily Leamer
COPY TO		
ELECTRONIC	ARCADIS	Attn: Rhiannon Parmalee
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
COPY TO		
ELECTRONIC	ExxonMobil	Attn: Julie Foster
COPY TO		
ELECTRONIC	ARCADIS	Attn: Kim Abbott
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## Analysis Report

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Respectfully Submitted,

Katherine A. Klinefelter Principal Specialist

Katherine a. Klinefelter

(717) 556-7256



Project Name: Mayflower, AR Pipeline Incident LL Group #: 1483436

#### General Comments:

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

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

Project specific QC samples are not included in this data set

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

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

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

#### Analysis Specific Comments:

### SW-846 8270C SIM, GC/MS Semivolatiles

#### Sample #s: 7506358, 7506359, 7506360

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: fluoranthene

#### Sample #s: 7506361, 7506362

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis. The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of  $\pm$  4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: fluoranthene 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 #: 14171wAJ026 (Sample number(s): 7506358-7506362)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: Fluoranthene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7506361, 7506362



## Analysis Report

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Sample Description: WS-007(0.5-1.0)061914 Grab Surface Water

LL Sample # WW 7506358 S20135565 Mayflower, AR LL Group # 1483436 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/19/2014 10:10 by ZP ExxonMobil PO Box 4592

Submitted: 06/20/2014 09:30 Houston TX 77210-4592

Reported: 07/02/2014 13:48

19007 SDG#: PEO06-01

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	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	0.012 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.	0.031	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

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for  ${\rm MS/MSD}$  or  ${\rm MS/DUP}$  analysis.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of  $\pm$  4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: fluoranthene

#### 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 Ti	me	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14171WAJ026	07/01/2014	23:42	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14171WAJ026	06/21/2014	09:00	Seth A Farrier	1



## Analysis Report

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Sample Description: WS-009(Surface)061914 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7506359

LL Group # 1483436 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/19/2014 10:15 by ZP ExxonMobil

PO Box 4592

Houston TX 77210-4592

Submitted: 06/20/2014 09:30 Reported: 07/02/2014 13:48

19009 SDG#: PEO06-02

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	0.051	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

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for  ${\rm MS/MSD}$  or  ${\rm MS/DUP}$  analysis.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of  $\pm$  4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: fluoranthene

#### 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 Ti	me	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14171WAJ026	07/02/2014	02:30	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14171WAJ026	06/21/2014	09:00	Seth A Farrier	1



## Analysis Report

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Sample Description: WS-001(0.5-1.0)061914 Grab Surface Water

LL Sample # WW 7506360 S20135565 Mayflower, AR LL Group # 1483436 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/19/2014 10:25 by ZP ExxonMobil PO Box 4592

Submitted: 06/20/2014 09:30 Houston TX 77210-4592

Reported: 07/02/2014 13:48

19001 SDG#: PEO06-03

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.	0.031	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

The laboratory did not receive sufficient sample volume to perform

the method QC requirement for  ${\rm MS/MSD}$  or  ${\rm MS/DUP}$  analysis.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of  $\pm$  4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance: fluoranthene

#### 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 Ti	me	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14171WAJ026	07/02/2014	00:38	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14171WAJ026	06/21/2014	09:00	Seth A Farrier	1



## Analysis Report

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Sample Description: WS-021(Surface)061914 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7506361 LL Group # 1483436

Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/19/2014 10:30 by ZP ExxonMobil PO Box 4592

Houston TX 77210-4592

Submitted: 06/20/2014 09:30 Reported: 07/02/2014 13:48

19021 SDG#: PEO06-04

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	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

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

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.

#### 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 Ti	me	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14171WAJ026	07/02/2014	01:06	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14171WAJ026	06/21/2014	09:00	Seth A Farrier	1



## Analysis Report

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Sample Description: WS-004(0.5-1.0)061914 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7506362 LL Group # 1483436

Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 06/19/2014 10:35 by ZP ExxonMobil PO Box 4592

Houston TX 77210-4592

Submitted: 06/20/2014 09:30 Reported: 07/02/2014 13:48

19004 SDG#: PEO06-05\*

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.	0.031	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

The laboratory did not receive sufficient sample volume to perform the method QC requirement for MS/MSD or MS/DUP analysis.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC Standards. The following analytes are accepted based on this allowance:

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.

#### 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 Tim	ne	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14171WAJ026	07/02/2014	01:34	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14171WAJ026	06/21/2014	09:00	Seth A Farrier	1



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## Quality Control Summary

Client Name: ExxonMobil Group Number: 1483436

Reported: 07/02/14 at 01:48 PM

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 MDL**	Blank <u>LOQ</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 14171WAJ026	Sample numl	ber(s): 7	506358-750	6362					
Acenaphthene	N.D.	0.010	0.050	ug/l	102	105	83-119	3	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	88	94	81-130	6	30
Anthracene	N.D.	0.010	0.050	ug/l	92	100	83-125	9	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	90	93	79-122	3	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	94	97	80-121	4	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	93	94	79-136	1	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	100	106	72-132	6	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	90	96	81-131	6	30
Chrysene	N.D.	0.010	0.050	ug/l	97	101	84-118	4	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	88	102	66-133	14	30
Fluoranthene	N.D.	0.010	0.050	ug/l	83*	89	84-124	6	30
Fluorene	N.D.	0.010	0.050	ug/l	89	92	82-119	3	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	93	101	68-132	9	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	91	93	86-130	2	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	89	94	81-131	6	30
Naphthalene	N.D.	0.030	0.050	ug/l	89	92	82-122	3	30
Phenanthrene	N.D.	0.030	0.050	ug/l	95	96	83-116	1	30
Pyrene	N.D.	0.010	0.050	ug/l	95	91	78-125	4	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.

Analysis Name: PAHs in waters by SIM

Batch number: 14171WAJ026

Bacen na	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene- d10
7506358	89	89	103
7506359	93	68	82
7506360	89	68	81
7506361	92	57*	79
7506362	86	46*	70
Blank	85	96	87
LCS	84	109	91
LCSD	92	113	93

- \*- 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.



# Analysis Report

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## Quality Control Summary

Client Name: ExxonMobil Group Number: 1483436

Reported: 07/02/14 at 01:48 PM

Surrogate Quality Control

Limits: 59-128 62-141 70-134

<sup>\*-</sup> Outside of specification

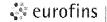
<sup>\*\*-</sup>This limit was used in the evaluation of the final result for the blank

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

<sup>(2)</sup> The unspiked result was more than four times the spike added.

# ExxonMobil Analysis Request/Chain of Custody

eurofins   Lancaster Laboratories	Acct. # 1473	9	Fc Group # Inst	or Eur # <u>/ \</u> truction	rofins / 83 s on re	Lanca 43 verse si	aster L . 6 de corre	aborato Sampl	ories u e # n circled	se onl 7 <i>50</i> Inumber	у 563 s.	58	-6	2		lot		
1) Client Information Facility #/SID Mayflower Pipeline Incident		4)	Matrix			5		Anal Pre		Req ation					SCR#:			
Mayflower Pipeline Incident Site Address Mayflower AR  ExxonMobil PM Mike SiXSMITA Cost Center/AFE			Ground Surface			SIM								6	$H = HCI$ $N = HNO_3$ $S = H_2SO_4$	B = N	hiosulfate IaOH Other	
Consultant/Office Ar (adis  Consultant PM Steve Barrick  Sampler  Consultant Phone # 9 19 - 302 -  Collecte  Consultant Phone # 9 19 - 302 -  Collecte	© 30site	il Sediment	Potable ☐ Water NPDES ☐	☐ Air ☐	tal # of Containers	4H 82:70												
Sample Identification         Date           W5~007 (0.5~1,0 )061914         €/19/14	Time G S	Soil	¾   V	Ö	Total					-						- Market		
	1015 X		X		3	分			+									
WS-001 (0.5-110) OC1914 6/19/14	1025 X		X		U	X			_									
W5-021 (Surface) 061914 6/19/14 1 W5-004 (0.5-1.0) 061914 6/19/14 1	030 X		X		ત ત	$\left  \frac{\hat{\lambda}}{\hat{\lambda}} \right $				-								
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7 Turnaround Time Requested (TAT) (please circle)  Standard 5 day 4 day	Relinquished by	<u>,</u>			Date /	9/	14	Time	) )		ived by				Date		Time	9
	Relinquished by	/ _		_	Date			Time		Rece	ived by		/		Date		Time	
72 hour 48 hour 24 hour	Relinquished by				Date		7	ime		Rece	ived by				Date		Time	
8	Relinquished by Commer		arrier edEx		Ot	her _				Rece	ived by	J X	9/1	,	Date	/ 1	Time 0930	
NJ Reduced Other	Tempe	ratur	e Upon Re	eceip	ot <u>Z</u>	.2	°	С			Cus	tody	Seals	Intac	t? ' <u>ƙ</u>	es	No	



## Sample Administration Receipt Documentation Log

Doc Log ID:

17991

Group Number(s):

1483436

Client: Mayflower

**Delivery and Receipt Information** 

**Delivery Method:** 

<u>UPS</u>

Arrival Timestamp:

06/20/2014 9:30

Number of Packages:

1

Number of Projects:

1

**Arrival Condition Summary** 

Shipping Container Sealed:

Yes

Total Trip Blank Qty:

0

**Custody Seal Present:** 

<u>Yes</u>

Trip Blank Type:

Air Quality Returns:

N/A

**Custody Seal Intact:** 

Yes

Air Quality Samples Present:

Air Quality Flow Controllers Present:

<u>No</u> N/A

Samples Chilled: Paperwork Enclosed: Yes Yes

Flow Controller Quantity:

0

N/A

Samples Intact:

Yes

No

Missing Samples: Extra Samples:

No

Discrepancy in Container Qty on COC:

No

Sample IDs on COC match Containers:

Yes

Sample Date/Times match COC: VOA Vial Headspace ≥ 6mm:

Yes

N/A

VOA IDs ( $\geq$ 6mm):

N/A

Unpacked by Joseph Gruber (5200) at 11:52 on 06/20/2014

**Samples Chilled Details** 

Thermometer Types:

DT = Digital (Temp. Bottle)

IR = Infrared (Surface Temp)

All Temperatures in °C.

Samples

Cooler # Thermometer ID 1 DT131

Corrected Temp 2.2

Therm, Type DT

Ice Type Wet

Ice Present?

Ice Container Bagged

Collected Same Day as Receipt?

Elevated Temp? Ν

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## **Explanation of Symbols and Abbreviations**

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
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 ≥ 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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