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

May 02, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 04/25/2014 Group Number: 1469755 SDG: PEM96 PO Number: 4410181435 Release Number: SIXSMITH State of Sample Origin: AR

Client Sample Description	<u>Lancaster Labs (LL) #</u>				
WS-007(0.5-1.0)042414 Grab Surface Water	7442069				
WS-009(Surface)042414 Grab Surface Water	7442070				
WS-001(0.5-1.0)042414 Grab Surface Water	7442071				
WS-021(Surface)042414 Grab Surface Water	7442072				
WS-004(0.5-1.0)042414 Grab Surface Water	7442073				

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
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ELECTRONIC	ARCADIS	Attn: Rhiannon Parmalee
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ELECTRONIC	ExxonMobil	Attn: Michael L Sixsmith
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ELECTRONIC	ExxonMobil	Attn: Julie Foster
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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



Case Narrative

Project Name: Mayflower, AR Pipeline Incident LLI Group #: 1469755

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: 7442069, 7442070, 7442071, 7442072, 7442073

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.



Analysis Report

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Sample Description: WS-007(0.5-1.0)042414 Grab Surface Water

S20135565 Mayflower, AR Pipeline Incident LL Group # 1469755 Account # 14739

LL Sample # WW 7442069

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/24/2014 10:55 by ZP ExxonMobil PO Box 4592

Houston TX 77210-4592

Submitted: 04/25/2014 09:20 Reported: 05/02/2014 18:30

P9601 SDG#: PEM96-01

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	N.D.	0.010	0.051	1
08357	Benzo(b) fluoranthene	205-99-2	0.016 J	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	0.012 J	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	0.017 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	0.036 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	0.014 J	0.010	0.051	1
Targ	et analytes were detected in	the method blank a	ssociated			

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

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	1	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14116WAA026	04/28/2014 1	9:33	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14116WAA026	04/27/2014 1	6:30	Elaine F Stoltzfus	1



Analysis Report

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Sample Description: WS-009(Surface)042414 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7442070 LL Group # 1469755

Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/24/2014 11:05 by ZP ExxonMobil PO Box 4592

Houston TX 77210-4592

Submitted: 04/25/2014 09:20 Reported: 05/02/2014 18:30

P9602 SDG#: PEM96-02

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	0.011 J	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	0.024 J	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.039 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.016 J	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	0.038 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	0.043 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.	0.031	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
Targ	et analytes were detected in t	the method blank a	ssociated			

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

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	14116WAA026	04/28/2014	20:01	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14116WAA026	04/27/2014	16:30	Elaine F Stoltzfus	1



Analysis Report

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Sample Description: WS-001(0.5-1.0)042414 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7442071 LL Group # 1469755

Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/24/2014 11:15 by ZP ExxonMobil PO Box 4592

Houston TX 77210-4592

Submitted: 04/25/2014 09:20 Reported: 05/02/2014 18:30

P9603 SDG#: PEM96-03

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	0.011 J	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	0.013 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.	0.031	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
Targ	et analytes were detected in t	the method blank a	ssociated			

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

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	14116WAA026	04/28/2014	20:28	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14116WAA026	04/27/2014	16:30	Elaine F Stoltzfus	1



Analysis Report

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Sample Description: WS-021(Surface)042414 Grab Surface Water

S20135565 Mayflower, AR

Pipeline Incident

LL Sample # WW 7442072

LL Group # 1469755 Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/24/2014 11:20 by ZP ExxonMobil

PO Box 4592

Houston TX 77210-4592

Submitted: 04/25/2014 09:20 Reported: 05/02/2014 18:30

P9604 SDG#: PEM96-04

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	0.012 J	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	0.012 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	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	0.014 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.	0.031	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
Tara	et analytes were detected in	the method blank a	ssociated			

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

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	14116WAA026	04/28/2014	20:56	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14116WAA026	04/27/2014	16:30	Elaine F Stoltzfus	1



Analysis Report

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Sample Description: WS-004(0.5-1.0)042414 Grab Surface Water

LL Sample # WW 7442073 S20135565 Mayflower, AR LL Group # 1469755 Pipeline Incident Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/24/2014 11:25 by ZP ExxonMobil PO Box 4592

Submitted: 04/25/2014 09:20 Houston TX 77210-4592

Reported: 05/02/2014 18:30

P9605 SDG#: PEM96-05*

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	0.052	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	0.011 J	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	0.011 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	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
Tara	et analytes were detected in t	he method blank a	ccociated			

Target analytes were detected in the method blank associated with the samples as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.

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	14116WAA026	04/28/2014	21:24	Chad A Moline	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14116WAA026	04/27/2014	16:30	Elaine F Stoltzfus	1

Environmental

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Quality Control Summary

Client Name: ExxonMobil Group Number: 1469755

Reported: 05/02/14 at 06:30 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>LOO</u>	Report <u>Units</u>	LCS %REC	LCSD %REC	LCS/LCSD <u>Limits</u>	RPD	RPD Max
Batch number: 14116WAA026	Sample n	umber(s):	7442069-74	42073					
Acenaphthene	N.D.	0.010	0.050	ug/l	115		83-119		
Acenaphthylene	N.D.	0.010	0.050	ug/l	107		81-130		
Anthracene	N.D.	0.010	0.050	ug/l	111		83-125		
Benzo(a)anthracene	0.022 J	0.010	0.050	ug/l	103		79-122		
Benzo(a)pyrene	0.021 J	0.010	0.050	ug/l	112		80-121		
Benzo(b)fluoranthene	0.027 J	0.010	0.050	ug/l	119		79-136		
Benzo(g,h,i)perylene	0.080	0.010	0.050	ug/l	111		72-132		
Benzo(k)fluoranthene	0.022 J	0.010	0.050	ug/l	117		81-131		
Chrysene	0.022 J	0.010	0.050	ug/l	105		84-118		
Dibenz(a,h)anthracene	0.063	0.010	0.050	ug/l	106		66-133		
Fluoranthene	0.015 J	0.010	0.050	ug/l	107		84-124		
Fluorene	N.D.	0.010	0.050	ug/l	105		82-119		
Indeno(1,2,3-cd)pyrene	0.062	0.010	0.050	ug/l	108		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	103		82-122		
Phenanthrene	N.D.	0.030	0.050	ug/l	107		83-116		
Pyrene	0.015 J	0.010	0.050	ug/l	101		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 %REC	MSD %REC	MS/MSD <u>Limits</u>	RPD	RPD <u>MAX</u>	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 14116WAA026	Sample	number(s)	: 7442069	-74420	73 UNSP	K: P435452			
Acenaphthene	119	117	60-130	2	30				
Acenaphthylene	114	112	75-132	2	30				
Anthracene	108	110	69-119	1	30				
Benzo(a)anthracene	103	103	37-135	0	30				
Benzo(a)pyrene	89	91	64-123	1	30				
Benzo(b)fluoranthene	102	100	41-137	2	30				
Benzo(g,h,i)perylene	84	83	21-127	3	30				
Benzo(k)fluoranthene	94	95	38-130	0	30				
Chrysene	88	90	58-117	2	30				
Dibenz(a,h)anthracene	83	82	17-134	2	30				
Fluoranthene	108	107	63-129	2	30				
Fluorene	113	110	74-127	3	30				
Indeno(1,2,3-cd)pyrene	87	84	26-130	4	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.

Analysis Report

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Quality Control Summary

Client Name: ExxonMobil Group Number: 1469755

Reported: 05/02/14 at 06:30 PM

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>	%REC	%REC	<u>Limits</u>	RPD	MAX	Conc	Conc	RPD	<u>Max</u>
1-Methylnaphthalene	103	101	82-133	2	30				
2-Methylnaphthalene	101	100	73-138	1	30				
Naphthalene	108	105	58-131	3	30				
Phenanthrene	111	107	72-126	4	30				
Pyrene	107	105	36-142	2	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: 14116WAA026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene- d10
7442069	104	91	94
7442070	109	91	96
7442071	109	99	96
7442072	107	106	95
7442073	106	105	100
Blank	108	106	98
LCS	112	123	103
MS	115	107	104
MSD	114	103	101
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.

ExxonMobil Analysis Request/Chain of Custody

eurofins	Lancaster Laborator Environmental		Acct. # _	147	139		For Eurof Group	ins La # 16 truction	ancas ((C ns on re	ter La 16 everse s	aborat 55 side corr	ories I _ San ^{espond}	Environ nple # _ with circle	mental 74 ed numbe	use o 120 rs.	nly O	1-73		- 0	71
1) Facility #/SID	Client Info	ormation	electrone control of the least			4)	Matrix			(5)			alyse					SCR	#:	~ ~
May flower Site Address May flow ExxonMobil PM	Pipeline Inc	Cost Center/AFE					Ground Surface						reserv	/ation	Code	9		N	= HNO ₃ B =	Codes Thiosulfate NaOH Other
Sampler Zaf	h Downe	Consultant Phone	‡ 2-6799	3	osite	Sediment	Potable NPDES	□ Air □	# of Containers	STM 8270								6	Remark	s
② Sample Identific	ation	Colle Dațe	cted Time	Grab	Composite	Soil	Water	Oil	Total #	444										
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7) Turnaround 1 Standard 72 hour	5 day 48 hour	(please circle) 4 day 24 hour	Relinquishe Relinquishe	a by	H				Date Date Date	124/	14	Time 173 Time Time	0	Rece	eived by	′			Date Date	Time (9)
8) Data Package Type I - Full Type VI (Raw NJ Reduced Other	Lo	DD (circle if required) cus EIM (default her		X		F	arrier edEx e Upon R	eceip		ther_		°C		Req	eved by M Cus	uf	Seals	Intact?	Date JS-IV	Time 20

7053 0713

🐫 eurofins

Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID:

12708

Group Number(s): 14 69755

Client: ExxonMobil

Mayflower

Delivery and Receipt Information

Delivery Method:

<u>UPS</u>

Arrival Timestamp:

04/25/2014 9:20

Number of Packages:

1

Number of Projects:

1

State/Province of Origin:

AR

Arrival Condition Summary

Shipping Container Sealed:

Yes

Total Trip Blank Qty:

0

Custody Seal Present:

Yes Yes Trip Blank Type:

N/A

Custody Seal Intact:

Yes

Air Quality Samples Present:

Air Quality Flow Controllers Present:

<u>No</u> N/A

Samples Chilled: Paperwork Enclosed:

<u>Yes</u>

Flow Controller Quantity:

Air Quality Returns:

0

<u>N/A</u>

Samples Intact: Missing Samples: Yes

<u>No</u>

Extra Samples:

No

Discrepancy in Container Qty on COC:

No Yes

Sample IDs on COC match Containers: Sample Date/Times match COC:

Yes

VOA Vial Headspace ≥ 6mm:

N/A

VOA IDs (\geq 6mm):

N/A

Unpacked by Brandy Barclay (2299) at 09:44 on 04/25/2014

Samples Chilled Details: Mayflower

Thermometer Types:

DT = Digital (Temp. Bottle)

IR = Infrared (Surface Temp)

All Temperatures in °C.

Samples Collected Same

Cooler # Thermometer ID DT146

Corrected Temp

Therm. Type

Ice Type Ice Present?

Ice Container

Day as Receipt?

Elevated Temp?

0.4

DT

Wet

Bagged

Ν



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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