

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ExxonMobil
PO Box 4592
Houston TX 77210-4592

October 14, 2014

Project: Mayflower, AR Pipeline Incident

Submittal Date: 10/03/2014

Group Number: 1508345

SDG: PEO30

PO Number: 4410181435

Release Number: SIXSMITH

State of Sample Origin: AR

Client Sample DescriptionWS-007(0.5-1.0)100214 Grab Surface Water
WS-009(Surface)100214 Grab Surface Water
WS-001(0.5-1.0)100214 Grab Surface Water
WS-021(Surface)100214 Grab Surface Water
WS-004(0.5-1.0)100214 Grab Surface WaterLancaster Labs (LL) #7623841
7623842
7623843
7623844
7623845

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

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ELECTRONIC ARCADIS

Attn: Sonal Patil

COPY TO

ELECTRONIC ARCADIS

Attn: Kim Abbott

COPY TO

Respectfully Submitted,



Katherine A. Klinefelter
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident
LL Group #: 1508345

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.

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

Analysis Specific Comments:**SW-846 8270C SIM, GC/MS Semivolatiles**

Sample #s: 7623841, 7623842, 7623843, 7623844, 7623845

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

Sample Description: WS-007(0.5-1.0)100214 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7623841
LL Group # 1508345
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/02/2014 16:00 by MH

ExxonMobil

PO Box 4592

Submitted: 10/03/2014 09:30

Houston TX 77210-4592

Reported: 10/14/2014 13:13

MWS07 SDG#: PEO30-01

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	0.054	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	0.065	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.065	1
08357	Pyrene	129-00-0	N.D.	0.011	0.054	1

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

General Sample Comments

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14281WAB026	10/10/2014 04:22	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14281WAB026	10/08/2014 19:00	Nicholas W Shroyer	1

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

Sample Description: WS-009(Surface)100214 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7623842
LL Group # 1508345
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/02/2014 16:05 by MH

ExxonMobil

PO Box 4592

Submitted: 10/03/2014 09:30

Houston TX 77210-4592

Reported: 10/14/2014 13:13

MWS09 SDG#: PEO30-02

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.	0.030	0.061	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.061	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.

General Sample Comments

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14281WAB026	10/10/2014 04:50	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14281WAB026	10/08/2014 19:00	Nicholas W Shroyer	1

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

Sample Description: WS-001(0.5-1.0)100214 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7623843
LL Group # 1508345
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/02/2014 16:10 by MH

ExxonMobil

PO Box 4592

Submitted: 10/03/2014 09:30

Houston TX 77210-4592

Reported: 10/14/2014 13:13

MWS01 SDG#: PEO30-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C SIM	ug/l	ug/l	ug/l	
08357	Acenaphthene	83-32-9	N.D.	0.010	0.051	1
08357	Acenaphthylene	208-96-8	N.D.	0.010	0.051	1
08357	Anthracene	120-12-7	N.D.	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	N.D.	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	N.D.	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	N.D.	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	N.D.	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	N.D.	0.010	0.051	1
08357	Chrysene	218-01-9	N.D.	0.010	0.051	1
08357	Dibenz(a,h)anthracene	53-70-3	N.D.	0.010	0.051	1
08357	Fluoranthene	206-44-0	N.D.	0.010	0.051	1
08357	Fluorene	86-73-7	N.D.	0.010	0.051	1
08357	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.010	0.051	1
08357	1-Methylnaphthalene	90-12-0	N.D.	0.010	0.051	1
08357	2-Methylnaphthalene	91-57-6	N.D.	0.010	0.051	1
08357	Naphthalene	91-20-3	N.D.	0.030	0.061	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.061	1
08357	Pyrene	129-00-0	0.011 J	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.

General Sample Comments

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14281WAB026	10/10/2014 05:17	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14281WAB026	10/08/2014 19:00	Nicholas W Shroyer	1

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

Sample Description: WS-021(Surface)100214 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7623844
LL Group # 1508345
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/02/2014 16:15 by MH

ExxonMobil

PO Box 4592

Submitted: 10/03/2014 09:30

Houston TX 77210-4592

Reported: 10/14/2014 13:13

MWS21 SDG#: PEO30-04

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.	0.030	0.061	1
08357	Phenanthrene	85-01-8	N.D.	0.030	0.061	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.

General Sample Comments

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14281WAB026	10/10/2014 05:45	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14281WAB026	10/08/2014 19:00	Nicholas W Shroyer	1

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

Sample Description: WS-004(0.5-1.0)100214 Grab Surface Water
S20135565 Mayflower, AR
Pipeline Incident

LL Sample # WW 7623845
LL Group # 1508345
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 10/02/2014 16:20 by MH

ExxonMobil

PO Box 4592

Submitted: 10/03/2014 09:30

Houston TX 77210-4592

Reported: 10/14/2014 13:13

MWS04 SDG#: PEO30-05

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.	0.011	0.053	1
08357	Acenaphthylene	208-96-8	0.017 J	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	N.D.	0.032	0.063	1
08357	Phenanthrene	85-01-8	N.D.	0.032	0.063	1
08357	Pyrene	129-00-0	N.D.	0.011	0.053	1

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

General Sample Comments

The temperature of the temperature blank bottle upon receipt at the lab was 8.0 C using a digital thermometer. The sample bottles were then measured using an IR thermometer and were recorded at 8.5-16.0 C.

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	14281WAB026	10/10/2014 06:12	Mark A Clark	1
10470	BNA Water Extraction (SIM)	SW-846 3510C	1	14281WAB026	10/08/2014 19:00	Nicholas W Shroyer	1

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

Quality Control Summary

Client Name: ExxonMobil
Reported: 10/14/14 at 01:13 PM

Group Number: 1508345

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

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 14281WAB026 Sample number(s): 7623841-7623845									
Acenaphthene	N.D.	0.010	0.050	ug/l	119	119	82-126	0	30
Acenaphthylene	N.D.	0.010	0.050	ug/l	103	102	72-124	1	30
Anthracene	N.D.	0.010	0.050	ug/l	104	109	83-125	4	30
Benzo(a)anthracene	N.D.	0.010	0.050	ug/l	101	103	79-122	2	30
Benzo(a)pyrene	N.D.	0.010	0.050	ug/l	98	102	72-126	4	30
Benzo(b)fluoranthene	N.D.	0.010	0.050	ug/l	109	109	79-136	0	30
Benzo(g,h,i)perylene	N.D.	0.010	0.050	ug/l	92	98	59-137	7	30
Benzo(k)fluoranthene	N.D.	0.010	0.050	ug/l	96	105	72-129	9	30
Chrysene	N.D.	0.010	0.050	ug/l	103	106	77-122	3	30
Dibenz(a,h)anthracene	N.D.	0.010	0.050	ug/l	83	87	42-143	5	30
Fluoranthene	N.D.	0.010	0.050	ug/l	98	98	76-121	0	30
Fluorene	N.D.	0.010	0.050	ug/l	111	110	82-119	1	30
Indeno(1,2,3-cd)pyrene	N.D.	0.010	0.050	ug/l	87	94	53-136	7	30
1-Methylnaphthalene	N.D.	0.010	0.050	ug/l	86	85	75-117	2	30
2-Methylnaphthalene	N.D.	0.010	0.050	ug/l	79	78	68-124	1	30
Naphthalene	N.D.	0.030	0.060	ug/l	96	96	78-117	0	30
Phenanthrene	N.D.	0.030	0.060	ug/l	101	103	83-116	2	30
Pyrene	N.D.	0.010	0.050	ug/l	99	102	70-124	3	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: 14281WAB026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
7623841	70	37	68
7623842	84	49	72
7623843	86	55	73
7623844	83	55	70
7623845	86	73	75
Blank	94	102	81
LCS	94	105	82
LCSD	94	106	81
Limits:	56-134	36-156	59-132

*- 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.

Quality Control Summary

Client Name: ExxonMobil
Reported: 10/14/14 at 01:13 PM

Group Number: 1508345

Surrogate Quality Control

*- 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



Lancaster Laboratories
Environmental

Acct. # 14739

For Eurofins Lancaster Laboratories Environmental use only

Group # 1508345 Sample # 7623841-45

Instructions on reverse side correspond with circled numbers.

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks																																																																																																																											
								Preservation Code																																																																																																																																							
Facility #/SID <u>Mayflower pipeline Incident</u>				<input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Oil <input type="checkbox"/> Air	<input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface	Total # of Containers <u>PAH 8270 SIM</u>													Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other																																																																																																																												
Site Address <u>Mayflower AR</u>																																																																																																																																															
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Sampler <u>Matt Hamby</u>																																																																																																																																															
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7 Turnaround Time Requested (TAT) (please circle) <div style="display: flex; justify-content: space-around;"> <u>Standard</u> 5 day 4 day </div> <div style="display: flex; justify-content: space-around;"> 72 hour 48 hour 24 hour </div>				Relinquished by <u>[Signature]</u> Date <u>10-2-14</u> Time <u>1800</u>				Received by _____ Date _____ Time _____				9																																																																																																																																			
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8 Data Package (circle if required) Type I - Full Type VI (Raw Data) NJ Reduced Other _____				EDD (circle if required) Locus EIM (default) Other _____				Temperature Upon Receipt <u>8.0</u> °C <u>8.5</u> °C Custody Seals Intact? <u>Yes</u> No																																																																																																																																							

Katherine Klinefelter

1508345

From: Powers, Zachary <zpowers@craworld.com>
Sent: Friday, October 03, 2014 11:41 AM
To: Katherine Klinefelter
Cc: Hamby, Leland; Rhannon Parmelee; Sonal Patil
Subject: RE: Tracking and COCs for 10-2-2014

Katherine,

You are clear for go. Please run the samples as is.

Best,

Zac Powers
CRA Inc.
501.850.6610
501.224.1926

From: Katherine Klinefelter [mailto:KatherineKlinefelter@eurofinsus.com]
Sent: Friday, October 03, 2014 10:07 AM
To: Powers, Zachary
Cc: Hamby, Leland; Rhannon Parmelee; Sonal Patil
Subject: RE: Tracking and COCs for 10-2-2014

Hello,

Please see attached COCs and sample receipt doc log. The temperature bottle and sample containers were received at >6C. Wet ice was present in the bottom of the cooler at receipt. Should the lab proceed with entry and analysis of all samples?

Thanks,

Kathy

Katherine Klinefelter
Principal Project Manager, Environmental Client Services

Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
USA
Phone: +1 717-556-7256
Fax: +1 717-656-6766

Website: www.LancasterLabsEnv.com

Please note my new email address: KatherineKlinefelter@eurofinsus.com

1568345

From: Powers, Zachary [mailto:zpowers@craworld.com]
Sent: Thursday, October 02, 2014 6:43 PM
To: Katherine Klinefelter
Cc: Hamby, Leland; Rhiannon Parmelee; Sonal Patil
Subject: Fwd: Tracking and COCs for 10-2-2014

See attached COC and tracking for wood samples

Sent from my iPhone

Begin forwarded message:

From: "Hamby, Leland" <lhamby@craworld.com>
To: "Powers, Zachary" <zpowers@craworld.com>
Cc: "Peltier, Chad" <cpeltier@craworld.com>
Subject: Tracking and COCs for 10-2-2014

Please distribute as needed.

Matt Hamby
Conestoga-Rovers and Associates
6917 N. Classen Blvd.
Oklahoma City, Oklahoma 73116
Office: (405) 748-4841
Cell: (405) 315-3346
Fax: (405) 748-4891
lhamby@craworld.com <mailto:lhamby@craworld.com>

CRA and GHD have merged! To learn more, visit
www.CRAworld.com/ghd <<http://www.CRAworld.com/ghd>>

Notify us [here](#) to report this email as spam.

Sample Administration
Receipt Documentation Log

Doc Log ID: 32237

Group Number(s): 1508345

Client: ExxonMobil

Delivery and Receipt Information

Delivery Method: UPS Arrival Timestamp: 10/03/2014 9:30
 Number of Packages: 1 Number of Projects: 1
 State/Province of Origin: AR

Arrival Condition Summary

Shipping Container Sealed:	<u>Yes</u>	Total Trip Blank Qty:	<u>0</u>
Custody Seal Present:	<u>Yes</u>	Trip Blank Type:	<u>N/A</u>
Custody Seal Intact:	<u>Yes</u>	Air Quality Samples Present:	<u>No</u>
Samples Chilled:	<u>Yes</u>	Air Quality Flow Controllers Present:	<u>N/A</u>
Paperwork Enclosed:	<u>Yes</u>	Flow Controller Quantity:	<u>0</u>
Samples Intact:	<u>Yes</u>	Air Quality Returns:	<u>N/A</u>
Missing Samples:	<u>No</u>		
Extra Samples:	<u>No</u>		
Discrepancy in Container 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 \geq 6mm:	<u>N/A</u>		
VOA IDs (\geq 6mm):	<u>N/A</u>		

Unpacked by Brandy Barclay (2299) at 10:22 on 10/03/2014

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?	Samples Collected Same Day as Receipt?
1	DT146	8.0	DT	Wet	Y	Bagged	Y	N

Elevated Temperature Details

All Temperatures in °C

Cooler #	Thermometer ID	Top Left Temp	Top Right Temp	Bottom Left Temp	Bottom Right Temp	Center Temp	Factors Contributing to Elevated Temp	Comments
1	8013596-IR	16.0	15.5	12.3	10.9	8.5	Ice on bottom of cooler	

Samples In Elevated-Temperature Coolers

Cooler #	Sample ID
1	ALL ID'S

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	BMQL	Below Minimum Quantitation Level
N.D.	none detected	MPN	Most Probable Number
TNTC	Too Numerous To Count	CP Units	cobalt-chloroplatinate units
IU	International Units	NTU	nephelometric turbidity units
umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
<	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Data Qualifiers:

C – result confirmed by reanalysis.

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

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

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

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

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