

Sample Description: WS-007(0.5-1.0)072613 Grab Surface Water
Mayflower, AR
Pipeline Incident

LL Sample # WW 7142305
LL Group # 1407334
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/26/2013 13:20 by JW

ExxonMobil

Submitted: 07/27/2013 09:35

Mobil Pipeline Company

Reported: 07/30/2013 13:30

PO Box 4416

Houston TX 77210-4416

0705- SDG#: PEJ49-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	Acetone	67-64-1	3.8 J	3.0	5.0	1
02898	Allyl Chloride	107-05-1	N.D.	0.1	0.5	1
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Bromobenzene	108-86-1	N.D.	0.1	0.5	1
02898	Bromochloromethane	74-97-5	N.D.	0.1	0.5	1
02898	Bromodichloromethane	75-27-4	N.D.	0.1	0.5	1
02898	Bromoform	75-25-2	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	2-Butanone	78-93-3	N.D.	1.0	5.0	1
02898	n-Butylbenzene	104-51-8	N.D.	0.1	0.5	1
02898	sec-Butylbenzene	135-98-8	N.D.	0.1	0.5	1
02898	tert-Butylbenzene	98-06-6	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroethane	75-00-3	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	2-Chlorotoluene	95-49-8	N.D.	0.1	0.5	1
02898	4-Chlorotoluene	106-43-4	N.D.	0.1	0.5	1
02898	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.2	0.5	1
02898	Dibromochloromethane	124-48-1	N.D.	0.1	0.5	1
02898	1,2-Dibromoethane	106-93-4	N.D.	0.1	0.5	1
02898	Dibromomethane	74-95-3	N.D.	0.1	0.5	1
02898	1,2-Dichlorobenzene	95-50-1	N.D.	0.1	0.5	1
02898	1,3-Dichlorobenzene	541-73-1	N.D.	0.1	0.5	1
02898	1,4-Dichlorobenzene	106-46-7	N.D.	0.1	0.5	1
02898	Dichlorodifluoromethane	75-71-8	N.D.	0.1	0.5	1
02898	1,1-Dichloroethane	75-34-3	N.D.	0.1	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	0.5	1
02898	trans-1,2-Dichloroethene	156-60-5	N.D.	0.1	0.5	1
02898	Dichlorofluoromethane	75-43-4	N.D.	0.2	0.5	1
02898	1,2-Dichloropropane	78-87-5	N.D.	0.1	0.5	1
02898	1,3-Dichloropropane	142-28-9	N.D.	0.1	0.5	1
02898	2,2-Dichloropropane	594-20-7	N.D.	0.1	0.5	1
02898	1,1-Dichloropropene	563-58-6	N.D.	0.1	0.5	1
02898	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.1	0.5	1
02898	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.1	0.5	1
02898	Ethyl ether	60-29-7	N.D.	0.1	0.5	1
02898	Ethylbenzene	100-41-4	N.D.	0.1	0.5	1
02898	Freon 113	76-13-1	N.D.	0.2	0.5	1
02898	Hexachlorobutadiene	87-68-3	N.D.	0.1	0.5	1
02898	Isopropylbenzene	98-82-8	N.D.	0.1	0.5	1
02898	p-Isopropyltoluene	99-87-6	N.D.	0.1	0.5	1
02898	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.1	0.5	1
02898	4-Methyl-2-Pentanone	108-10-1	N.D.	1.0	5.0	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	n-Propylbenzene	103-65-1	N.D.	0.1	0.5	1
02898	Styrene	100-42-5	N.D.	0.1	0.5	1

Reference ID:

1407334300713132954

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

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0705- SDG#: PEJ49-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS	Volatiles	SW-846 8260B 25mL	ug/l	ug/l	ug/l	
	purge					
02898	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	0.1	0.5	1
02898	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Tetrahydrofuran	109-99-9	N.D.	2.0	5.0	1
02898	Toluene	108-88-3	0.3 J	0.1	0.5	1
02898	1,2,3-Trichlorobenzene	87-61-6	N.D.	0.1	0.5	1
02898	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.1	0.5	1
02898	1,1,1-Trichloroethane	71-55-6	N.D.	0.1	0.5	1
02898	1,1,2-Trichloroethane	79-00-5	N.D.	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Trichlorofluoromethane	75-69-4	N.D.	0.1	0.5	1
02898	1,2,3-Trichloropropane	96-18-4	N.D.	0.3	1.0	1
02898	1,2,4-Trimethylbenzene	95-63-6	N.D.	0.1	0.5	1
02898	1,3,5-Trimethylbenzene	108-67-8	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1
02898	Xylene (Total)	1330-20-7	N.D.	0.1	0.5	1

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	0.011 J	0.010	0.051	1
08357	Anthracene	120-12-7	0.020 J	0.010	0.051	1
08357	Benzo(a)anthracene	56-55-3	0.021 J	0.010	0.051	1
08357	Benzo(a)pyrene	50-32-8	0.022 J	0.010	0.051	1
08357	Benzo(b)fluoranthene	205-99-2	0.052	0.010	0.051	1
08357	Benzo(g,h,i)perylene	191-24-2	0.022 J	0.010	0.051	1
08357	Benzo(k)fluoranthene	207-08-9	0.032 J	0.010	0.051	1
08357	Chrysene	218-01-9	0.048 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	0.058	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	0.024 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	0.051	0.010	0.051	1

This data is to be considered preliminary. The recovery for the sample surrogate(s) is outside the QC acceptance limits. The sample has been submitted for re-extraction.

Metals		SM 2340 B-1997	mg/l	mg/l	mg/l	
06256	Total Hardness as CaCO3	471-34-1	257	0.033	0.20	1
		SW-846 6010B	mg/l	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.113	0.0068	0.0200	1
07046	Barium	7440-39-3	2.21	0.00033	0.0050	1
07049	Cadmium	7440-43-9	0.0097	0.00076	0.0050	1
01750	Calcium	7440-70-2	43.6	0.0334	0.200	1
07051	Chromium	7440-47-3	0.259	0.0016	0.0150	1

Reference ID:

1407334300713132954

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

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Houston TX 77210-4416

0705- SDG#: PEJ49-13

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
Metals			mg/l	mg/l	mg/l	
07055	Lead	7439-92-1	0.859	0.0047	0.0150	1
01757	Magnesium	7439-95-4	36.1	0.0167	0.100	1
07061	Nickel	7440-02-0	0.279	0.0015	0.0100	1
07036	Selenium	7782-49-2	0.0139 J	0.0084	0.0200	1
07066	Silver	7440-22-4	0.0034 J	0.0021	0.0050	1
07071	Vanadium	7440-62-2	0.380	0.0020	0.0050	1
SW-846 6010B			mg/l	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.00030	0.0010	1
Reporting limits were raised due to interference from the sample matrix.						
Wet Chemistry			mg/l	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	5.0	1
EPA 1664A						

General Sample Comments

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	Silvertip & Mayflower VOCs8260	SW-846 8260B 25mL purge	1	I132101AA	07/29/2013 11:46	Kerri E Legerlotz	1
08357	PAHs in waters by SIM	SW-846 8270C SIM	1	13209WAA026	07/30/2013 06:46	Brian K Graham	1
06256	Total Hardness as CaCO3	SM 2340 B-1997	1	132116256001	07/30/2013 04:34	Deborah A Krady	1
07035	Arsenic	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07046	Barium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07049	Cadmium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
01750	Calcium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07051	Chromium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07055	Lead	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
01757	Magnesium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07061	Nickel	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07036	Selenium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07066	Silver	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
07071	Vanadium	SW-846 6010B	1	132081848002	07/30/2013 02:06	Tara L Snyder	1
00259	Mercury	SW-846 7470A	1	132085713001	07/30/2013 05:53	Damary Valentin	1
08079	HEM (oil & grease)	EPA 1664A	1	13210807901A	07/29/2013 08:37	Yolunder Y Bunch	1

ExxonMobil Analysis Request/Chain of Custody



Lancaster Laboratories

Acct. # 14739 Group # 1407334 For Lancaster Laboratories use only Sample # 1142293-312
Instructions on reverse side correspond with circled numbers.

1042

1 Client Information				4 Matrix				5 Analyses Requested												6 Remarks																			
Facility #/SID Site Address ExxonMobil PM Cost Center/AFE Consultant/Office Consultant PM Consultant Phone # Sampler				Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input checked="" type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/>				Preservation Code												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other																			
								<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>H</td><td>N</td><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>VOCs 8260</td><td>PAHs 8270 SIM</td><td>PCRA metals V, Ni, Cr, Mn, Pb</td><td>Diss Metals</td><td>Oil and Grease HEM</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>														H	N	H												VOCs 8260	PAHs 8270 SIM	PCRA metals V, Ni, Cr, Mn, Pb	Diss Metals
H	N	H																																					
VOCs 8260	PAHs 8270 SIM	PCRA metals V, Ni, Cr, Mn, Pb	Diss Metals	Oil and Grease HEM																																			
2 Sample Identification			3 Collected		Grab	Composite	Soil	Water	Oil	Total # of Containers																													
Date	Time																																						
WS-014(1.5-2.0)072613	7/26/13	910			X					9	X	X	X	X	X																								
WS-014(5.5-6.0)072613		920			X					9	X	X	X	X	X																								
WS-012(1.5-2.0)072613		950			X					9	X	X	X	X	X																								
WS-012(5.0-5.5)072613		1000			X					9	X	X	X	X	X																								
WS-010(1.5-2.0)072613		1020			X					9	X	X	X	X	X																								
WS-010(3.5-4.0)072613		1030			X					9	X	X	X	X	X																								
WS-005(Surface)072613		1100			X					9	X	X	X	X	X																								
WS-011(1.5-2.0)072613		1140			X					9	X	X	X	X	X																								
WS-011(5.0-5.5)072613		1150			X					9	X	X	X	X	X																								
WS-003(Surface)072613		1215			X					9	X	X	X	X	X																								
WS-002(Surface)072613		1245			X					9	X	X	X	X	X																								
WS-018(Surface)072613		1230			X					9	X	X	X	X	X																								

7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>Handwritten Signature</u>		Date <u>7/26/13</u>	Time <u>1830</u>	Received by		Date	Time
Standard	<u>5 day</u>	4 day		Relinquished by		Date	Time	Received by		Date	Time
72 hour	48 hour	24 hour		Relinquished by		Date	Time	Received by		Date	Time
8 Data Package (circle if required)				Relinquished by Commercial Carrier		Temperature Upon Receipt <u>0.7-5.0</u> °C		Custody Seals Intact?		Yes	No
Type I - Full	Type VI (Raw Data)	NJ Reduced	Other	UPS FedEx <u>X</u> Other				Received by <u>Handwritten Signature</u>		Date <u>7/26/13</u>	Time <u>0935</u>
EDD (circle if required)				Locus EIM (default)							
				Other							

Acct. # 14739

For Lancaster Laboratories use only
Group # 1407334 Sample # 7142293-3/2
Instructions on reverse side correspond with circled numbers.

20f2

[illegible]

Eurofins Lancaster Laboratories, Inc. • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Lancaster Laboratories. The yellow copy should be retained by the client.

Issued by Dept. 40 Management
7053.01

Carolyn M. Cyms *A# 14739, Gr# 1407334, Sample 7142293-312*

From: Parmelee, Rhiannon [Rhiannon.Parmelee@arcadis-us.com]
Sent: Saturday, July 27, 2013 2:34 PM
To: Kathy Klinefelter; Van Aller, Hans; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Lipka, Shelby; Pritchard, Jamie
Subject: RE: Mayflower COCs Surface water sampling 072613

Email rush results is fine (option #2).

Rhiannon Parmelee
 ARCADIS
 Office (303 471 3904) Cell (206 914 9625)

----- Original message -----

From: Kathy Klinefelter <KKlinefelter@lancasterlabs.com>
Date: 07/27/2013 1:13 PM (GMT-06:00)
To: "Parmelee, Rhiannon" <Rhiannon.Parmelee@arcadis-us.com>, "Van Aller, Hans" <Hans.VanAller@arcadis-us.com>, "Mott, Lyndi" <Lyndi.Mott@arcadis-us.com>, "Barrick, Stephen" <Stephen.Barrick@arcadis-us.com>, "Brewer, Stacey" <Stacey.Brewer@arcadis-us.com>, "Kull, Valerie" <Valerie.Kull@arcadis-us.com>, "SA Env Entry" <SAEnvEntry@lancasterlabs.com>, "Capria, Dennis" <Dennis.Capria@arcadis-us.com>, "Rachel L. Kreamer" <RKreamer@lancasterlabs.com>, "McKenzie, Mary" <Mary.McKenzie@arcadis-us.com>, "Chandler, Jennifer" <Jennifer.Chandler@arcadis-us.com>
Cc: "Molina, Joe" <Joe.Molina@arcadis-us.com>, "Lipka, Shelby" <Shelby.Lipka@arcadis-us.com>, "Pritchard, Jamie" <Jamie.Pritchard@arcadis-us.com>
Subject: RE: Mayflower COCs Surface water sampling 072613

Does WS-007(0.5-1.0)072613 need to be voided and entered in its own group in order to issue the final report and EDD in 24 hours, or can we leave it entered with the rest of the 5 day group, email rush results for the sample on Tuesday, and then have it included in the final report and EDD issued when the 5 day TAT samples report?

From: Parmelee, Rhiannon [mailto:Rhiannon.Parmelee@arcadis-us.com]
Sent: Saturday, July 27, 2013 2:08 PM
To: Kathy Klinefelter; Van Aller, Hans; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer
Cc: Molina, Joe; Lipka, Shelby; Pritchard, Jamie
Subject: RE: Mayflower COCs Surface water sampling 072613

Yes, that is the correct sample id. The rest of the samples would be 5 day TAT. Thank you.

Rhiannon Parmelee
 ARCADIS
 Office (303 471 3904) Cell (206 914 9625)

7/27/2013

A# 14739, Gr# 1407334, Samples 7142293-312

----- Original message -----

From: Kathy Klinefelter <KKlinefelter@lancasterlabs.com>

Date: 07/27/2013 11:59 AM (GMT-06:00)

To: "Parmelee, Rhiannon" <Rhiannon.Parmelee@arcadis-us.com>, "Van Aller, Hans" <Hans.VanAller@arcadis-us.com>, "Mott, Lyndi" <Lyndi.Mott@arcadis-us.com>, "Barrick, Stephen" <Stephen.Barrick@arcadis-us.com>, "Brewer, Stacey" <Stacey.Brewer@arcadis-us.com>, "Kull, Valerie" <Valerie.Kull@arcadis-us.com>, SA Env Entry <SAEnvEntry@lancasterlabs.com>, "Capria, Dennis" <Dennis.Capria@arcadis-us.com>, "Rachel L. Kreamer" <RKreamer@lancasterlabs.com>, "McKenzie, Mary" <Mary.McKenzie@arcadis-us.com>, "Chandler, Jennifer" <Jennifer.Chandler@arcadis-us.com>

Cc: "Molina, Joe" <Joe.Molina@arcadis-us.com>, "Lipka, Shelby" <Shelby.Lipka@arcadis-us.com>, "Pritchard, Jamie" <Jamie.Pritchard@arcadis-us.com>

Subject: RE: Mayflower COCs Surface water sampling 072613

Please confirm full sample ID for 24 hour request is WS-007(0.5-1.0)072613. The rest of the samples in the surface water group will still be on 5 day TAT, but we will try to have results for this one sample on Tuesday 7/30.

From: Parmelee, Rhiannon [mailto:Rhiannon.Parmelee@arcadis-us.com]

Sent: Saturday, July 27, 2013 8:49 AM

To: Kathy Klinefelter; Van Aller, Hans; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer

Cc: Molina, Joe; Lipka, Shelby; Pritchard, Jamie

Subject: RE: Mayflower COCs Surface water sampling 072613

Kathy -

The attached COC was a different from the "Downstream Areas Remedial Sampling Plan (DARSP)" that is kicking off today. For reference, we are using the letters "DA" for sediment/soils/SW associated with that sampling event. For example, a sediment sample ID will look like this: SED-DA-033(0.5-1.0). Obviously, that's more important on our end, but would help you understand when the samples are associated with that event.

And I am task managing both the daily surface water sampling (more from the office) and the DARSP sampling. DARSP a ridiculous acronym, but helps us keep that sampling separate from the other activities.

As for the additional cove samples collected yesterday, those should be the same analytes as the daily surface water sampling (meaning, don't worry about TSS or the alkylated PAHs). And I forgot yesterday when Hans asked me, but is it too late to move WS-007(0.5-1.0) from the 5-day TAT time to the 24-hour TAT. We had asked for 24-hour TAT because the client would like the two SH samples back as soon as possible, realizing that would be Tuesday because of the weekend.

And per Shelby's email yesterday regarding the weekend sampling, that list does include the sediment sampling for the DARSP. We will be starting with sediment sampling this week. (the only sediment sampling currently underway is associated with the DARSP sampling event).

Does this make more sense? I'm out in Arkansas through today and tomorrow. I'm going to attempt to catch up on emails from yesterday – but if you don't hear back on something specific, please re-send.

7/27/2013

Rhiannon *A# 14739, Gr# 1407334, Samples 7142293-312*

From: Kathy Klinefelter [mailto:KKlinefelter@lanasterlabs.com]

Sent: Friday, July 26, 2013 10:57 PM

To: Van Aller, Hans; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer

Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie

Subject: RE: Mayflower COCs Surface water sampling 072613

Please clarify. Is the attached cove COC part of the Downstream Cove project, or from another cove? Are the 24 hour cove surface water results needed Monday or Tuesday? Tuesday would be the due date for 24 hours = 1 business day rush TAT. Also, please confirm the analyses requested for the cove surface water samples. The COC requests PAHs by SIM, but does not request TSS. Was TSS dropped for this set of cove samples and PAHs SIM added? Our understanding was that Lancaster would not be analyzing any Downstream Cove samples for PAHs SIM and that B&B would be analyzing all cove surface water samples for Alkylated PAHs. Thanks!

From: Van Aller, Hans [mailto:Hans.VanAller@arcadis-us.com]

Sent: Friday, July 26, 2013 9:19 PM

To: Kathy Klinefelter; Mott, Lyndi; Barrick, Stephen; Brewer, Stacey; Kull, Valerie; SA Env Entry; Capria, Dennis; Rachel L. Kreamer; McKenzie, Mary; Chandler, Jennifer

Cc: Molina, Joe; Lipka, Shelby; Parmelee, Rhiannon; Pritchard, Jamie

Subject: Mayflower COCs Surface water sampling 072613

Hello All

Attached are the COCs from today's surface water sampling activities.

Thanks,

Hans H. van Aller IV | Field Tech 3 | Hans.VanAller@arcadis-us.com

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7/27/2013

G-1407334
Environmental Sample Administration
Receipt Documentation LogClient/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 7/27/13Custody Seal Present *: YES NOTime of Receipt: 0935

* Custody seal was intact unless otherwise noted in the discrepancy section

Source Code: 50Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	DT131	1.7	TB	WI	Y	B	SH
2	↓	4.2	↓	↓	↓	↓	SW
3	↓	1.4	↓	↓	↓	↓	SW
4	↓	2.3	↓	↓	↓	↓	SO
5	↓	0.7	↓	↓	↓	↓	SW
6	↓	3.0	↓	↓	↓	↓	SW

Number of Trip Blanks received NOT listed on chain of custody: 01035
CUM - (5)
7/27/13

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#:

964

Date/Time:

7/27/13

1035

Issued by Dept. 6042 Management

6-1407334

Environmental Sample Administration
Receipt Documentation LogClient/Project: Exxon MobilShipping Container Sealed: YES NODate of Receipt: 7/27/13Custody Seal Present *: YES NOTime of Receipt: 0935* Custody seal was intact unless otherwise noted in the
discrepancy sectionSource Code: 50Package: Chilled Not Chilled

Temperature of Shipping Containers

Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
17	DT131	0.4	TB	WI	Y	B	SW + SH
78	↓	5.0	↓	↓	↓	↓	SW
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#:

Carlynn / 964Date/Time: 7/27/13 1035

Issued by Dept. 6042 Management

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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