

## ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

ExxonMobil  
Mobil Pipeline Company  
PO Box 4416  
Houston TX 77210-4416

July 17, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 07/10/2013

Group Number: 1402816

SDG: PEI89

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LL) #

|                                          |         |
|------------------------------------------|---------|
| WS-003(Surface)070913 Grab Surface Water | 7121762 |
| WS-002(Surface)070913 Grab Surface Water | 7121763 |
| WS-005(Surface)070913 Grab Surface Water | 7121764 |
| WS-001(Surface)070913 Grab Surface Water | 7121765 |
| WS-001(0.5-1.0)070913 Grab Surface Water | 7121766 |
| WS-004(Surface)070913 Grab Surface Water | 7121767 |
| WS-004(0.5-1.0)070913 Grab Surface Water | 7121768 |
| WS-007(Surface)070913 Grab Surface Water | 7121769 |
| WS-007(0.5-1.0)070913 Grab Surface Water | 7121770 |
| WS-006(Surface)070913 Grab Surface Water | 7121771 |
| WS-006(0.5-1.0)070913 Grab Surface Water | 7121772 |
| DUP-WS-53-070913 Grab Surface Water      | 7121773 |
| WS-TB-92-070913 Water                    | 7121774 |

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

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ARCADIS

Attn: Stephen Barrick

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Attn: Lyndi Mott

ELECTRONIC COPY TO  
ExxonMobil

Attn: Michael J. Firth

ELECTRONIC COPY TO  
ARCADIS

Attn: Emily Leamer

ELECTRONIC COPY TO  
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Attn: Rhiannon Parmalee

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ARCADIS  
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Attn: Jamie Pritchard  
Attn: Michael L Sixsmith  
Attn: Julie Foster  
Attn: Carl Wideman

Respectfully Submitted,



Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1402816

**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 8260B 25mL purge, GC/MS Volatiles**

Batch #: H131921AA (Sample number(s): 7121762-7121774 UNSPK: 7121762)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,1,2-Trichloroethane, 1,3-Dichloropropane, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene

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

Batch #: 13191WAK026 (Sample number(s): 7121762-7121773)

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7121764, 7121769

Sample #s: 7121764, 7121769

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.

**SW-846 6010B, Metals**

Batch #: 131911848003 (Sample number(s): 7121762-7121773 UNSPK: 7121768 BKG: 7121768)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Magnesium, Vanadium

Sample Description: WS-003(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121762  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:10 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79003 SDG#: PEI89-01

| 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           | N.D.               | 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               |

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

Sample Description: WS-003(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121762  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:10 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79003 SDG#: PEI89-01

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 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                 | 0.021 J            | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | 0.013 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                 | 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                 | 0.013 J            | 0.010                               | 0.051                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 26.5               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0427             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 5.83               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** WS-003 (Surface) 070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121762  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:10 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79003 SDG#: PEI89-01

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.90               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0037 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 11:49       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 11:49       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 08:27       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:32       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:08       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:33       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

**Sample Description:** WS-002(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121763  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:35 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79002 SDG#: PEI89-02

| 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           | N.D.               | 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               |

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

Sample Description: WS-002(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121763  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:35 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79002 SDG#: PEI89-02

| 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   | n-Propylbenzene           | 103-65-1          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 02898   | Styrene                   | 100-42-5          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 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          | N.D.               | 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          | 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           | 0.014 J            | 0.010                               | 0.051                             | 1               |
| 08357   | 2-Methylnaphthalene       | 91-57-6           | 0.014 J            | 0.010                               | 0.051                             | 1               |
| 08357   | Naphthalene               | 91-20-3           | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357   | Phenanthrene              | 85-01-8           | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357   | Pyrene                    | 129-00-0          | N.D.               | 0.010                               | 0.051                             | 1               |
| Metals  |                           | SM 2340 B-1997    | mg/l               | mg/l                                | mg/l                              |                 |
| 06256   | Total Hardness as CaCO3   | 471-34-1          | 26.5               | 0.033                               | 0.20                              | 1               |
|         |                           | SW-846 6010B      | mg/l               | mg/l                                | mg/l                              |                 |
| 07035   | Arsenic                   | 7440-38-2         | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046   | Barium                    | 7440-39-3         | 0.0214             | 0.00033                             | 0.0050                            | 1               |
| 07049   | Cadmium                   | 7440-43-9         | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750   | Calcium                   | 7440-70-2         | 6.03               | 0.0334                              | 0.200                             | 1               |

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



**Sample Description:** WS-002(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121763  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 09:35 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79002 SDG#: PEI89-02

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.79               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0022 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 13:52       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 13:52       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 08:54       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:36       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:12       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:35       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

**Sample Description:** WS-005(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121764  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:05 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79005 SDG#: PEI89-03

| 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           | N.D.               | 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               |

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

**Sample Description:** WS-005(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121764  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:05 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79005 SDG#: PEI89-03

| CAT No.                                                                                                                                                  | Analysis Name                       | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                             | <b>Volatiles</b>                    | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|                                                                                                                                                          | <b>purge</b>                        |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>                                                                                                                                             | <b>Semivolatiles</b>                | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08357                                                                                                                                                    | Acenaphthene                        | 83-32-9                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Acenaphthylene                      | 208-96-8                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Anthracene                          | 120-12-7                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(a)anthracene                  | 56-55-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(a)pyrene                      | 50-32-8                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(b)fluoranthene                | 205-99-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(g,h,i)perylene                | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(k)fluoranthene                | 207-08-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Chrysene                            | 218-01-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Dibenz(a,h)anthracene               | 53-70-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Fluoranthene                        | 206-44-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Fluorene                            | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Indeno(1,2,3-cd)pyrene              | 193-39-5                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | 1-Methylnaphthalene                 | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | 2-Methylnaphthalene                 | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Naphthalene                         | 91-20-3                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Phenanthrene                        | 85-01-8                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Pyrene                              | 129-00-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 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. |                                     |                          |                    |                                     |                                   |                 |
| <b>Metals</b>                                                                                                                                            | <b>SM 2340 B-1997</b>               | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 06256                                                                                                                                                    | Total Hardness as CaCO <sub>3</sub> | 471-34-1                 | 26.0               | 0.033                               | 0.20                              | 1               |
|                                                                                                                                                          | <b>SW-846 6010B</b>                 | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07035                                                                                                                                                    | Arsenic                             | 7440-38-2                | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046                                                                                                                                                    | Barium                              | 7440-39-3                | 0.0201             | 0.00033                             | 0.0050                            | 1               |

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

**Sample Description:** WS-005(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121764  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:05 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79005 SDG#: PEI89-03

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 5.99               | 0.0334                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.67               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0024 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 14:33       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 14:33       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 09:21       | Brian K Graham    | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:47       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:24       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:37       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-001(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121765  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:25 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79011 SDG#: PEI89-04

| 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           | N.D.               | 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               |

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

Sample Description: WS-001(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121765  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:25 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79011 SDG#: PEI89-04

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 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               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 25.9               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0503             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 5.88               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** WS-001(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121765  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:25 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79011 SDG#: PEI89-04

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.72               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0015 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 14:54       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 14:54       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 09:48       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:51       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:28       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:45       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-001(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121766  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:30 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79012 SDG#: PEI89-05

| 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           | N.D.               | 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               |

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



Sample Description: WS-001(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121766  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:30 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79012 SDG#: PEI89-05

| 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   | n-Propylbenzene           | 103-65-1          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 02898   | Styrene                   | 100-42-5          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 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          | N.D.               | 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          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Anthracene                | 120-12-7          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Benzo(a)anthracene        | 56-55-3           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Benzo(a)pyrene            | 50-32-8           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Benzo(b)fluoranthene      | 205-99-2          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Benzo(g,h,i)perylene      | 191-24-2          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Benzo(k)fluoranthene      | 207-08-9          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Chrysene                  | 218-01-9          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Dibenz(a,h)anthracene     | 53-70-3           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Fluoranthene              | 206-44-0          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Fluorene                  | 86-73-7           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Indeno(1,2,3-cd)pyrene    | 193-39-5          | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | 1-Methylnaphthalene       | 90-12-0           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | 2-Methylnaphthalene       | 91-57-6           | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357   | Naphthalene               | 91-20-3           | 0.034 J            | 0.030                               | 0.051                             | 1               |
| 08357   | Phenanthrene              | 85-01-8           | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357   | Pyrene                    | 129-00-0          | N.D.               | 0.010                               | 0.051                             | 1               |
| Metals  |                           | SM 2340 B-1997    | mg/l               | mg/l                                | mg/l                              |                 |
| 06256   | Total Hardness as CaCO3   | 471-34-1          | 27.5               | 0.033                               | 0.20                              | 1               |
|         |                           | SW-846 6010B      | mg/l               | mg/l                                | mg/l                              |                 |
| 07035   | Arsenic                   | 7440-38-2         | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046   | Barium                    | 7440-39-3         | 0.0629             | 0.00033                             | 0.0050                            | 1               |
| 07049   | Cadmium                   | 7440-43-9         | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750   | Calcium                   | 7440-70-2         | 6.26               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** WS-001(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121766  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:30 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79012 SDG#: PEI89-05

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | 0.0021 J           | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.89               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0037 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0027 J           | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 16:16       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 16:16       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 10:15       | Brian K Graham    | 1               |
| 10470   | BNM Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:55       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:32       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:47       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-004(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121767  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:33 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79041 SDG#: PEI89-06

| 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           | N.D.               | 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               |

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

Sample Description: WS-004(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121767  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:33 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79041 SDG#: PEI89-06

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | 0.2 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08357         | Acenaphthene              | 83-32-9                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluoranthene              | 206-44-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | 0.032 J            | 0.030                               | 0.051                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 24.4               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | 0.0116 J           | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.232              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 5.75               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** WS-004(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121767  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:33 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79041 SDG#: PEI89-06

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | 0.0041 J           | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.44               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0050 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0054             | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 16:36       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 16:36       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 10:42       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:59       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:36       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:49       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-004(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121768  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:40 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79042 SDG#: PEI89-07

| 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           | 3.0 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               |

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

**Sample Description:** WS-004(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121768  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:40 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79042 SDG#: PEI89-07

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | 2.0                | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 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                  | 0.018 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | 0.019 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | 0.043 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | 0.024 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | 0.015 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | 0.040 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.010                               | 0.052                             | 1               |
| 08357         | Fluoranthene              | 206-44-0                 | 0.032 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | 0.016 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | 0.017 J            | 0.010                               | 0.052                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | 0.032 J            | 0.010                               | 0.052                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | 0.034 J            | 0.010                               | 0.052                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.031                               | 0.052                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | 0.032 J            | 0.031                               | 0.052                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | 0.034 J            | 0.010                               | 0.052                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 43.0               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | 0.0203             | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.293              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | 0.0014 J           | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 8.59               | 0.0334                              | 0.200                             | 1               |

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

Sample Description: WS-004(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121768  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:40 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79042 SDG#: PEI89-07

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | 0.0435             | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0772             | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 5.24               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0340             | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0570             | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | 0.000088 J         | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 16:57       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 16:57       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 11:09       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 10:09       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 17:45       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:55       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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



Sample Description: WS-007(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121769  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:55 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79071 SDG#: PEI89-08

| 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           | 3.3 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               |

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

**Sample Description:** WS-007(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121769  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:55 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79071 SDG#: PEI89-08

| CAT No.                                                                                                                                                  | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>                                                                                                                                             | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|                                                                                                                                                          | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>                                                                                                                                             | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 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                  | 0.013 J            | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(a)pyrene            | 50-32-8                  | 0.011 J            | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(b)fluoranthene      | 205-99-2                 | 0.027 J            | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Benzo(k)fluoranthene      | 207-08-9                 | 0.012 J            | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Chrysene                  | 218-01-9                 | 0.020 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                 | 0.030 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                  | 0.011 J            | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Naphthalene               | 91-20-3                  | 0.041 J            | 0.030                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357                                                                                                                                                    | Pyrene                    | 129-00-0                 | 0.029 J            | 0.010                               | 0.051                             | 1               |
| 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. |                           |                          |                    |                                     |                                   |                 |
| <b>Metals</b>                                                                                                                                            | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 06256                                                                                                                                                    | Total Hardness as CaCO3   | 471-34-1                 | 20.3               | 0.033                               | 0.20                              | 1               |
|                                                                                                                                                          | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07035                                                                                                                                                    | Arsenic                   | 7440-38-2                | 0.0090 J           | 0.0068                              | 0.0200                            | 1               |
| 07046                                                                                                                                                    | Barium                    | 7440-39-3                | 0.0377             | 0.00033                             | 0.0050                            | 1               |

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

**Sample Description:** WS-007(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121769  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 10:55 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79071 SDG#: PEI89-08

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 4.71               | 0.0334                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0016 J           | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.09               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0028 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0037 J           | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 17:17       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 17:17       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 11:36       | Brian K Graham    | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 11:02       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:40       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:57       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

**Sample Description:** WS-007(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121770  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:00 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79072 SDG#: PEI89-09

| 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           | 3.1 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               |

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

**Sample Description:** WS-007(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121770  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:00 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79072 SDG#: PEI89-09

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | 0.9                | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08357         | Acenaphthene              | 83-32-9                  | 0.019 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | 0.012 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | 0.022 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | 0.033 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | 0.031 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | 0.10               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | 0.031 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | 0.030 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | 0.080              | 0.010                               | 0.050                             | 1               |
| 08357         | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluoranthene              | 206-44-0                 | 0.11               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | 0.016 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | 0.033 J            | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | 0.014 J            | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | 0.015 J            | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | 0.054              | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | 0.11               | 0.010                               | 0.050                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 25.1               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | 0.0103 J           | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0957             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 5.14               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** WS-007(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121770  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:00 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79072 SDG#: PEI89-09

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | 0.0102 J           | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0072 J           | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.98               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0093 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0161             | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 17:38       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 17:38       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 12:03       | Brian K Graham    | 1               |
| 10470   | BNM Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 11:06       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:44       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 08:59       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-006(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121771  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:15 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79061 SDG#: PEI89-10

| 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           | N.D.               | 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               |

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

Sample Description: WS-006(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121771  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:15 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79061 SDG#: PEI89-10

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08357         | Acenaphthene              | 83-32-9                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluoranthene              | 206-44-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | 0.13               | 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               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 26.7               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0414             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 6.10               | 0.0334                              | 0.200                             | 1               |

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



**Sample Description:** WS-006(Surface)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121771  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:15 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79061 SDG#: PEI89-10

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.79               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0022 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 17:58       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 17:58       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 12:30       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 11:10       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:47       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 09:01       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

**Sample Description:** WS-006(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121772  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:20 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79062 SDG#: PEI89-11

| 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           | N.D.               | 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               |

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

**Sample Description:** WS-006(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121772  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:20 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79062 SDG#: PEI89-11

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | N.D.               | 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 08357         | Acenaphthene              | 83-32-9                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluoranthene              | 206-44-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | 0.096              | 0.030                               | 0.051                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 0.010                               | 0.051                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 28.4               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0670             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 6.27               | 0.0334                              | 0.200                             | 1               |

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

Sample Description: WS-006(0.5-1.0)070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121772  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 11:20 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79062 SDG#: PEI89-11

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | 0.0031 J           | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 3.09               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0032 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0055             | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 18:19       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 18:19       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 12:57       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 11:14       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:51       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 09:03       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

**Sample Description:** DUP-WS-53-070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121773  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79D53 SDG#: PEI89-12FD

| 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           | N.D.               | 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               |

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

Sample Description: DUP-WS-53-070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121773  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013 by AP

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79D53 SDG#: PEI89-12FD

| CAT No.       | Analysis Name             | CAS Number               | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------------------|--------------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>GC/MS</b>  | <b>Volatiles</b>          | <b>SW-846 8260B 25mL</b> | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
|               | <b>purge</b>              |                          |                    |                                     |                                   |                 |
| 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               |
| 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                 | 0.2 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               |
| <b>GC/MS</b>  | <b>Semivolatiles</b>      | <b>SW-846 8270C SIM</b>  | <b>ug/l</b>        | <b>ug/l</b>                         | <b>ug/l</b>                       |                 |
| 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                 | 0.011 J            | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | 0.034 J            | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | 0.011 J            | 0.010                               | 0.051                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | 0.035 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                 | 0.065              | 0.010                               | 0.051                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | 0.012 J            | 0.010                               | 0.051                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | 0.038 J            | 0.030                               | 0.051                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | 0.033 J            | 0.010                               | 0.051                             | 1               |
| <b>Metals</b> | <b>SM 2340 B-1997</b>     | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 20.1               | 0.033                               | 0.20                              | 1               |
|               | <b>SW-846 6010B</b>       | <b>mg/l</b>              | <b>mg/l</b>        | <b>mg/l</b>                         |                                   |                 |
| 07035         | Arsenic                   | 7440-38-2                | 0.0069 J           | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium                    | 7440-39-3                | 0.0400             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00076                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 4.69               | 0.0334                              | 0.200                             | 1               |

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

**Sample Description:** DUP-WS-53-070913 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121773  
LL Group # 1402816  
Account # 14739

**Project Name:** Mayflower, AR Pipeline Incident

Collected: 07/09/2013 by AP

ExxonMobil

Mobil Pipeline Company

Submitted: 07/10/2013 09:25

PO Box 4416

Reported: 07/17/2013 17:30

Houston TX 77210-4416

79D53 SDG#: PEI89-12FD

| CAT No.       | Analysis Name | CAS Number          | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------------|---------------|---------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| <b>Metals</b> |               |                     |                    |                                     |                                   |                 |
|               |               | <b>SW-846 6010B</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0016                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0047                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.03               | 0.0167                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0030 J           | 0.0015                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0084                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0021                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0035 J           | 0.0020                              | 0.0050                            | 1               |
|               |               | <b>SW-846 7470A</b> | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 00259         | Mercury       | 7439-97-6           | N.D.               | 0.000060                            | 0.00020                           | 1               |

## 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.

## 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      | H131921AA    | 07/11/2013 18:39       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | H131921AA    | 07/11/2013 18:39       | Kerri E Legerlotz | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13191WAK026  | 07/17/2013 13:24       | Brian K Graham    | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13191WAK026  | 07/11/2013 10:35       | Catherine R Wiker | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131936256001 | 07/12/2013 06:11       | Deborah A Krady   | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131911848003 | 07/12/2013 11:17       | Joanne M Gates    | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131911848003 | 07/11/2013 18:55       | John P Hook       | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131915713003 | 07/11/2013 09:05       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131911848003 | 07/11/2013 11:11       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131915713003 | 07/10/2013 15:10       | Nelli S Markaryan | 1               |

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

Sample Description: WS-TB-92-070913 Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121774  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79T92 SDG#: PEI89-13TB\*

| 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           | N.D.               | 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               |

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



Sample Description: WS-TB-92-070913 Water  
Mayflower, AR  
Pipeline Incident

LL Sample # WW 7121774  
LL Group # 1402816  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 07/09/2013

ExxonMobil

Submitted: 07/10/2013 09:25

Mobil Pipeline Company

Reported: 07/17/2013 17:30

PO Box 4416

Houston TX 77210-4416

79T92 SDG#: PEI89-13TB\*

| 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   | n-Propylbenzene           | 103-65-1          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 02898   | Styrene                   | 100-42-5          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 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          | N.D.               | 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               |

## 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.

## 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<br>purge | 1      | H131921AA | 07/11/2013 19:00       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B               | 1      | H131921AA | 07/11/2013 19:00       | Kerri E Legerlotz | 1               |

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 07/17/13 at 05:30 PM

Group Number: 1402816

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

| <u>Analysis Name</u>        | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: H131921AA     | Sample number(s): 7121762-7121774 |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                     | N.D.                              | 3.0                | 5.0              | ug/l                | 82              |                  | 73-135                 |            |                |
| Allyl Chloride              | N.D.                              | 0.1                | 0.5              | ug/l                | 90              |                  | 61-130                 |            |                |
| Benzene                     | N.D.                              | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| Bromobenzene                | N.D.                              | 0.1                | 0.5              | ug/l                | 92              |                  | 80-120                 |            |                |
| Bromochloromethane          | N.D.                              | 0.1                | 0.5              | ug/l                | 114             |                  | 80-125                 |            |                |
| Bromodichloromethane        | N.D.                              | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |
| Bromoform                   | N.D.                              | 0.1                | 0.5              | ug/l                | 97              |                  | 63-132                 |            |                |
| Bromomethane                | N.D.                              | 0.1                | 0.5              | ug/l                | 104             |                  | 38-146                 |            |                |
| 2-Butanone                  | N.D.                              | 1.0                | 5.0              | ug/l                | 74              |                  | 70-130                 |            |                |
| n-Butylbenzene              | N.D.                              | 0.1                | 0.5              | ug/l                | 90              |                  | 80-120                 |            |                |
| sec-Butylbenzene            | N.D.                              | 0.1                | 0.5              | ug/l                | 92              |                  | 80-120                 |            |                |
| tert-Butylbenzene           | N.D.                              | 0.1                | 0.5              | ug/l                | 94              |                  | 80-120                 |            |                |
| Carbon Tetrachloride        | N.D.                              | 0.1                | 0.5              | ug/l                | 116             |                  | 74-133                 |            |                |
| Chlorobenzene               | N.D.                              | 0.1                | 0.5              | ug/l                | 96              |                  | 80-120                 |            |                |
| Chloroethane                | N.D.                              | 0.1                | 0.5              | ug/l                | 99              |                  | 67-124                 |            |                |
| Chloroform                  | N.D.                              | 0.1                | 0.5              | ug/l                | 109             |                  | 80-120                 |            |                |
| Chloromethane               | N.D.                              | 0.2                | 0.5              | ug/l                | 96              |                  | 55-135                 |            |                |
| 2-Chlorotoluene             | N.D.                              | 0.1                | 0.5              | ug/l                | 93              |                  | 80-120                 |            |                |
| 4-Chlorotoluene             | N.D.                              | 0.1                | 0.5              | ug/l                | 94              |                  | 80-120                 |            |                |
| 1,2-Dibromo-3-chloropropane | N.D.                              | 0.2                | 0.5              | ug/l                | 78              |                  | 57-141                 |            |                |
| Dibromochloromethane        | N.D.                              | 0.1                | 0.5              | ug/l                | 95              |                  | 80-126                 |            |                |
| 1,2-Dibromoethane           | N.D.                              | 0.1                | 0.5              | ug/l                | 96              |                  | 80-120                 |            |                |
| Dibromomethane              | N.D.                              | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |
| 1,2-Dichlorobenzene         | N.D.                              | 0.1                | 0.5              | ug/l                | 94              |                  | 80-120                 |            |                |
| 1,3-Dichlorobenzene         | N.D.                              | 0.1                | 0.5              | ug/l                | 94              |                  | 80-120                 |            |                |
| 1,4-Dichlorobenzene         | N.D.                              | 0.1                | 0.5              | ug/l                | 93              |                  | 80-112                 |            |                |
| Dichlorodifluoromethane     | N.D.                              | 0.1                | 0.5              | ug/l                | 94              |                  | 39-120                 |            |                |
| 1,1-Dichloroethane          | N.D.                              | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| 1,2-Dichloroethane          | N.D.                              | 0.1                | 0.5              | ug/l                | 104             |                  | 80-127                 |            |                |
| 1,1-Dichloroethene          | N.D.                              | 0.1                | 0.5              | ug/l                | 113             |                  | 80-123                 |            |                |
| cis-1,2-Dichloroethene      | N.D.                              | 0.1                | 0.5              | ug/l                | 109             |                  | 80-120                 |            |                |
| trans-1,2-Dichloroethene    | N.D.                              | 0.1                | 0.5              | ug/l                | 115             |                  | 80-120                 |            |                |
| Dichlorofluoromethane       | N.D.                              | 0.2                | 0.5              | ug/l                | 113             |                  | 63-149                 |            |                |
| 1,2-Dichloropropane         | N.D.                              | 0.1                | 0.5              | ug/l                | 104             |                  | 80-120                 |            |                |
| 1,3-Dichloropropane         | N.D.                              | 0.1                | 0.5              | ug/l                | 90              |                  | 80-120                 |            |                |
| 2,2-Dichloropropane         | N.D.                              | 0.1                | 0.5              | ug/l                | 104             |                  | 75-122                 |            |                |
| 1,1-Dichloropropene         | N.D.                              | 0.1                | 0.5              | ug/l                | 109             |                  | 80-121                 |            |                |
| cis-1,3-Dichloropropene     | N.D.                              | 0.1                | 0.5              | ug/l                | 102             |                  | 74-120                 |            |                |
| trans-1,3-Dichloropropene   | N.D.                              | 0.1                | 0.5              | ug/l                | 89              |                  | 73-126                 |            |                |
| Ethyl ether                 | N.D.                              | 0.1                | 0.5              | ug/l                | 100             |                  | 59-130                 |            |                |
| Ethylbenzene                | N.D.                              | 0.1                | 0.5              | ug/l                | 93              |                  | 80-120                 |            |                |
| Freon 113                   | N.D.                              | 0.2                | 0.5              | ug/l                | 108             |                  | 78-132                 |            |                |
| Hexachlorobutadiene         | N.D.                              | 0.1                | 0.5              | ug/l                | 91              |                  | 61-125                 |            |                |

\*- 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

Group Number: 1402816

Reported: 07/17/13 at 05:30 PM

| <u>Analysis Name</u>        | <u>Blank Result</u> | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|-----------------------------|---------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Isopropylbenzene            | N.D.                | 0.1                | 0.5              | ug/l                | 98              |                  | 80-120                 |            |                |
| p-Isopropyltoluene          | N.D.                | 0.1                | 0.5              | ug/l                | 92              |                  | 80-120                 |            |                |
| Methyl Tertiary Butyl Ether | N.D.                | 0.1                | 0.5              | ug/l                | 106             |                  | 80-125                 |            |                |
| 4-Methyl-2-Pentanone        | N.D.                | 1.0                | 5.0              | ug/l                | 100             |                  | 69-135                 |            |                |
| Methylene Chloride          | N.D.                | 0.2                | 0.5              | ug/l                | 109             |                  | 80-120                 |            |                |
| n-Propylbenzene             | N.D.                | 0.1                | 0.5              | ug/l                | 90              |                  | 80-120                 |            |                |
| Styrene                     | N.D.                | 0.1                | 0.5              | ug/l                | 98              |                  | 80-120                 |            |                |
| 1,1,1,2-Tetrachloroethane   | N.D.                | 0.1                | 0.5              | ug/l                | 99              |                  | 80-120                 |            |                |
| 1,1,2,2-Tetrachloroethane   | N.D.                | 0.1                | 0.5              | ug/l                | 89              |                  | 80-125                 |            |                |
| Tetrachloroethene           | N.D.                | 0.1                | 0.5              | ug/l                | 100             |                  | 80-120                 |            |                |
| Tetrahydrofuran             | N.D.                | 2.0                | 5.0              | ug/l                | 76              |                  | 65-131                 |            |                |
| Toluene                     | N.D.                | 0.1                | 0.5              | ug/l                | 95              |                  | 80-120                 |            |                |
| 1,2,3-Trichlorobenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 82              |                  | 63-120                 |            |                |
| 1,2,4-Trichlorobenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 89              |                  | 70-120                 |            |                |
| 1,1,1-Trichloroethane       | N.D.                | 0.1                | 0.5              | ug/l                | 112             |                  | 79-127                 |            |                |
| 1,1,2-Trichloroethane       | N.D.                | 0.1                | 0.5              | ug/l                | 93              |                  | 80-120                 |            |                |
| Trichloroethene             | N.D.                | 0.1                | 0.5              | ug/l                | 108             |                  | 80-120                 |            |                |
| Trichlorofluoromethane      | N.D.                | 0.1                | 0.5              | ug/l                | 104             |                  | 77-132                 |            |                |
| 1,2,3-Trichloropropane      | N.D.                | 0.3                | 1.0              | ug/l                | 92              |                  | 80-120                 |            |                |
| 1,2,4-Trimethylbenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 93              |                  | 80-120                 |            |                |
| 1,3,5-Trimethylbenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 92              |                  | 80-120                 |            |                |
| Vinyl Chloride              | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 65-127                 |            |                |
| Xylene (Total)              | N.D.                | 0.1                | 0.5              | ug/l                | 97              |                  | 80-120                 |            |                |

Batch number: 13191WAK026

Sample number(s): 7121762-7121773

|                        |      |       |       |      |     |     |        |    |    |
|------------------------|------|-------|-------|------|-----|-----|--------|----|----|
| Acenaphthene           | N.D. | 0.010 | 0.050 | ug/l | 104 | 88  | 65-124 | 17 | 30 |
| Acenaphthylene         | N.D. | 0.010 | 0.050 | ug/l | 108 | 91  | 72-113 | 17 | 30 |
| Anthracene             | N.D. | 0.010 | 0.050 | ug/l | 107 | 93  | 70-117 | 14 | 30 |
| Benzo(a)anthracene     | N.D. | 0.010 | 0.050 | ug/l | 107 | 97  | 75-115 | 10 | 30 |
| Benzo(a)pyrene         | N.D. | 0.010 | 0.050 | ug/l | 104 | 96  | 72-120 | 8  | 30 |
| Benzo(b)fluoranthene   | N.D. | 0.010 | 0.050 | ug/l | 110 | 106 | 74-130 | 3  | 30 |
| Benzo(g,h,i)perylene   | N.D. | 0.010 | 0.050 | ug/l | 105 | 100 | 63-121 | 5  | 30 |
| Benzo(k)fluoranthene   | N.D. | 0.010 | 0.050 | ug/l | 112 | 102 | 74-118 | 9  | 30 |
| Chrysene               | N.D. | 0.010 | 0.050 | ug/l | 103 | 99  | 75-112 | 5  | 30 |
| Dibenz(a,h)anthracene  | N.D. | 0.010 | 0.050 | ug/l | 98  | 98  | 66-122 | 1  | 30 |
| Fluoranthene           | N.D. | 0.010 | 0.050 | ug/l | 107 | 97  | 73-116 | 10 | 30 |
| Fluorene               | N.D. | 0.010 | 0.050 | ug/l | 103 | 89  | 74-115 | 15 | 30 |
| Indeno(1,2,3-cd)pyrene | N.D. | 0.010 | 0.050 | ug/l | 100 | 100 | 66-122 | 0  | 30 |
| 1-Methylnaphthalene    | N.D. | 0.010 | 0.050 | ug/l | 108 | 92  | 72-114 | 16 | 30 |
| 2-Methylnaphthalene    | N.D. | 0.010 | 0.050 | ug/l | 103 | 87  | 74-119 | 17 | 30 |
| Naphthalene            | N.D. | 0.030 | 0.050 | ug/l | 103 | 89  | 67-118 | 15 | 30 |
| Phenanthrene           | N.D. | 0.030 | 0.050 | ug/l | 104 | 91  | 72-109 | 14 | 30 |
| Pyrene                 | N.D. | 0.010 | 0.050 | ug/l | 104 | 94  | 71-116 | 10 | 30 |

Batch number: 131911848003

Sample number(s): 7121762-7121773

|           |         |         |        |      |     |  |        |  |  |
|-----------|---------|---------|--------|------|-----|--|--------|--|--|
| Arsenic   | N.D.    | 0.0068  | 0.0200 | mg/l | 103 |  | 90-113 |  |  |
| Barium    | N.D.    | 0.00033 | 0.0050 | mg/l | 100 |  | 90-110 |  |  |
| Cadmium   | N.D.    | 0.00076 | 0.0050 | mg/l | 102 |  | 90-112 |  |  |
| Calcium   | 0.102 J | 0.0334  | 0.200  | mg/l | 105 |  | 90-110 |  |  |
| Chromium  | N.D.    | 0.0016  | 0.0150 | mg/l | 102 |  | 90-110 |  |  |
| Lead      | N.D.    | 0.0047  | 0.0150 | mg/l | 102 |  | 88-110 |  |  |
| Magnesium | N.D.    | 0.0167  | 0.100  | mg/l | 103 |  | 90-110 |  |  |
| Nickel    | N.D.    | 0.0015  | 0.0100 | mg/l | 105 |  | 90-111 |  |  |
| Selenium  | N.D.    | 0.0084  | 0.0200 | mg/l | 97  |  | 80-120 |  |  |
| Silver    | N.D.    | 0.0021  | 0.0050 | mg/l | 91  |  | 80-120 |  |  |
| Vanadium  | N.D.    | 0.0020  | 0.0050 | mg/l | 106 |  | 90-110 |  |  |

\*- 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

Group Number: 1402816

Reported: 07/17/13 at 05:30 PM

| <u>Analysis Name</u>       | <u>Blank Result</u>               | <u>Blank MDL**</u> | <u>Blank LOQ</u> | <u>Report Units</u> | <u>LCS %REC</u> | <u>LCSD %REC</u> | <u>LCS/LCSD Limits</u> | <u>RPD</u> | <u>RPD Max</u> |
|----------------------------|-----------------------------------|--------------------|------------------|---------------------|-----------------|------------------|------------------------|------------|----------------|
| Batch number: 131915713003 | Sample number(s): 7121762-7121773 |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                    | N.D.                              | 0.00006            | 0.00020          | mg/l                | 90              |                  | 80-120                 |            |                |
|                            |                                   | 0                  |                  |                     |                 |                  |                        |            |                |

## 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

| <u>Analysis Name</u>        | <u>MS %REC</u>                                   | <u>MSD %REC</u> | <u>MS/MSD Limits</u> | <u>RPD</u> | <u>RPD MAX</u> | <u>BKG Conc</u> | <u>DUP Conc</u> | <u>DUP RPD</u> | <u>Dup RPD Max</u> |
|-----------------------------|--------------------------------------------------|-----------------|----------------------|------------|----------------|-----------------|-----------------|----------------|--------------------|
| Batch number: H131921AA     | Sample number(s): 7121762-7121774 UNSPK: 7121762 |                 |                      |            |                |                 |                 |                |                    |
| Acetone                     | 80                                               | 83              | 57-163               | 3          | 30             |                 |                 |                |                    |
| Allyl Chloride              | 85                                               | 88              | 67-139               | 4          | 30             |                 |                 |                |                    |
| Benzene                     | 96                                               | 98              | 87-126               | 3          | 30             |                 |                 |                |                    |
| Bromobenzene                | 83                                               | 91              | 80-123               | 9          | 30             |                 |                 |                |                    |
| Bromochloromethane          | 104                                              | 106             | 82-125               | 2          | 30             |                 |                 |                |                    |
| Bromodichloromethane        | 92                                               | 101             | 82-133               | 9          | 30             |                 |                 |                |                    |
| Bromoform                   | 85                                               | 94              | 60-138               | 10         | 30             |                 |                 |                |                    |
| Bromomethane                | 103                                              | 105             | 41-145               | 2          | 30             |                 |                 |                |                    |
| 2-Butanone                  | 69                                               | 75              | 63-146               | 9          | 30             |                 |                 |                |                    |
| n-Butylbenzene              | 84                                               | 87              | 83-131               | 3          | 30             |                 |                 |                |                    |
| sec-Butylbenzene            | 85                                               | 89              | 84-128               | 4          | 30             |                 |                 |                |                    |
| tert-Butylbenzene           | 89                                               | 92              | 84-135               | 4          | 30             |                 |                 |                |                    |
| Carbon Tetrachloride        | 109                                              | 109             | 81-148               | 0          | 30             |                 |                 |                |                    |
| Chlorobenzene               | 88                                               | 93              | 78-133               | 6          | 30             |                 |                 |                |                    |
| Chloroethane                | 101                                              | 100             | 70-139               | 1          | 30             |                 |                 |                |                    |
| Chloroform                  | 101                                              | 103             | 86-136               | 2          | 30             |                 |                 |                |                    |
| Chloromethane               | 96                                               | 97              | 55-152               | 2          | 30             |                 |                 |                |                    |
| 2-Chlorotoluene             | 86                                               | 90              | 81-120               | 5          | 30             |                 |                 |                |                    |
| 4-Chlorotoluene             | 86                                               | 90              | 82-119               | 5          | 30             |                 |                 |                |                    |
| 1,2-Dibromo-3-chloropropane | 78                                               | 88              | 43-143               | 12         | 30             |                 |                 |                |                    |
| Dibromochloromethane        | 84                                               | 92              | 79-125               | 10         | 30             |                 |                 |                |                    |
| 1,2-Dibromoethane           | 83*                                              | 93              | 84-127               | 11         | 30             |                 |                 |                |                    |
| Dibromomethane              | 89                                               | 97              | 83-126               | 8          | 30             |                 |                 |                |                    |
| 1,2-Dichlorobenzene         | 85                                               | 91              | 83-117               | 7          | 30             |                 |                 |                |                    |
| 1,3-Dichlorobenzene         | 86                                               | 91              | 81-118               | 6          | 30             |                 |                 |                |                    |
| 1,4-Dichlorobenzene         | 85                                               | 90              | 79-120               | 6          | 30             |                 |                 |                |                    |
| Dichlorodifluoromethane     | 95                                               | 95              | 28-136               | 0          | 30             |                 |                 |                |                    |
| 1,1-Dichloroethane          | 97                                               | 97              | 88-136               | 1          | 30             |                 |                 |                |                    |
| 1,2-Dichloroethane          | 95                                               | 99              | 82-135               | 4          | 30             |                 |                 |                |                    |
| 1,1-Dichloroethene          | 108                                              | 107             | 83-150               | 0          | 30             |                 |                 |                |                    |
| cis-1,2-Dichloroethene      | 100                                              | 100             | 82-129               | 0          | 30             |                 |                 |                |                    |
| trans-1,2-Dichloroethene    | 105                                              | 105             | 88-127               | 0          | 30             |                 |                 |                |                    |
| Dichlorofluoromethane       | 113                                              | 115             | 59-176               | 2          | 30             |                 |                 |                |                    |
| 1,2-Dichloropropane         | 93                                               | 97              | 91-126               | 4          | 30             |                 |                 |                |                    |
| 1,3-Dichloropropane         | 78*                                              | 87              | 80-127               | 10         | 30             |                 |                 |                |                    |
| 2,2-Dichloropropane         | 98                                               | 98              | 80-134               | 1          | 30             |                 |                 |                |                    |
| 1,1-Dichloropropene         | 103                                              | 104             | 86-139               | 1          | 30             |                 |                 |                |                    |
| cis-1,3-Dichloropropene     | 90                                               | 96              | 74-132               | 6          | 30             |                 |                 |                |                    |
| trans-1,3-Dichloropropene   | 77                                               | 86              | 71-128               | 11         | 30             |                 |                 |                |                    |
| Ethyl ether                 | 89                                               | 91              | 67-127               | 2          | 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.

**Quality Control Summary**Client Name: ExxonMobil  
Reported: 07/17/13 at 05:30 PM

Group Number: 1402816

**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

| <u>Analysis Name</u>        | <u>MS</u><br><u>%REC</u> | <u>MSD</u><br><u>%REC</u> | <u>MS/MSD</u><br><u>Limits</u> | <u>RPD</u><br><u>MAX</u> | <u>BKG</u><br><u>Conc</u> | <u>DUP</u><br><u>Conc</u> | <u>DUP</u><br><u>RPD</u> | <u>Dup</u> <u>RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| Ethylbenzene                | 86                       | 90                        | 80-140                         | 5                        | 30                        |                           |                          |                                     |
| Freon 113                   | 103                      | 102                       | 87-158                         | 1                        | 30                        |                           |                          |                                     |
| Hexachlorobutadiene         | 86                       | 91                        | 65-128                         | 6                        | 30                        |                           |                          |                                     |
| Isopropylbenzene            | 89                       | 94                        | 81-133                         | 5                        | 30                        |                           |                          |                                     |
| p-Isopropyltoluene          | 86                       | 89                        | 84-124                         | 4                        | 30                        |                           |                          |                                     |
| Methyl Tertiary Butyl Ether | 94                       | 97                        | 82-132                         | 4                        | 30                        |                           |                          |                                     |
| 4-Methyl-2-Pentanone        | 89                       | 100                       | 69-149                         | 12                       | 30                        |                           |                          |                                     |
| Methylene Chloride          | 98                       | 99                        | 84-122                         | 2                        | 30                        |                           |                          |                                     |
| n-Propylbenzene             | 83                       | 87                        | 79-131                         | 4                        | 30                        |                           |                          |                                     |
| Styrene                     | 88                       | 94                        | 63-151                         | 7                        | 30                        |                           |                          |                                     |
| 1,1,1,2-Tetrachloroethane   | 90                       | 97                        | 87-126                         | 7                        | 30                        |                           |                          |                                     |
| 1,1,2,2-Tetrachloroethane   | 80                       | 86                        | 75-131                         | 8                        | 30                        |                           |                          |                                     |
| Tetrachloroethene           | 91                       | 95                        | 75-129                         | 4                        | 30                        |                           |                          |                                     |
| Tetrahydrofuran             | 71                       | 73                        | 56-154                         | 3                        | 30                        |                           |                          |                                     |
| Toluene                     | 87                       | 90                        | 83-127                         | 3                        | 30                        |                           |                          |                                     |
| 1,2,3-Trichlorobenzene      | 76                       | 83                        | 73-125                         | 9                        | 30                        |                           |                          |                                     |
| 1,2,4-Trichlorobenzene      | 81                       | 86                        | 77-120                         | 6                        | 30                        |                           |                          |                                     |
| 1,1,1-Trichloroethane       | 103                      | 105                       | 85-140                         | 2                        | 30                        |                           |                          |                                     |
| 1,1,2-Trichloroethane       | 83*                      | 93                        | 85-129                         | 11                       | 30                        |                           |                          |                                     |
| Trichloroethene             | 101                      | 103                       | 85-131                         | 2                        | 30                        |                           |                          |                                     |
| Trichlorofluoromethane      | 105                      | 107                       | 67-161                         | 2                        | 30                        |                           |                          |                                     |
| 1,2,3-Trichloropropane      | 82                       | 89                        | 76-120                         | 8                        | 30                        |                           |                          |                                     |
| 1,2,4-Trimethylbenzene      | 84*                      | 89                        | 87-126                         | 5                        | 30                        |                           |                          |                                     |
| 1,3,5-Trimethylbenzene      | 85*                      | 89                        | 89-129                         | 5                        | 30                        |                           |                          |                                     |
| Vinyl Chloride              | 104                      | 104                       | 65-151                         | 0                        | 30                        |                           |                          |                                     |
| Xylene (Total)              | 89                       | 94                        | 81-137                         | 6                        | 30                        |                           |                          |                                     |

|                            |                                                               |      |        |   |    |          |          |           |
|----------------------------|---------------------------------------------------------------|------|--------|---|----|----------|----------|-----------|
| Batch number: 131911848003 | Sample number(s): 7121762-7121773 UNSPK: 7121768 BKG: 7121768 |      |        |   |    |          |          |           |
| Arsenic                    | 102                                                           | 102  | 81-123 | 0 | 20 | 0.0203   | 0.0175 J | 15 (1) 20 |
| Barium                     | 104                                                           | 102  | 78-118 | 2 | 20 | 0.293    | 0.292    | 0 20      |
| Cadmium                    | 102                                                           | 100  | 83-116 | 2 | 20 | 0.0014 J | 0.0012 J | 14 (1) 20 |
| Calcium                    | 112                                                           | 104  | 81-118 | 3 | 20 | 8.59     | 8.67     | 1 20      |
| Chromium                   | 111                                                           | 108  | 81-120 | 2 | 20 | 0.0435   | 0.0434   | 0 (1) 20  |
| Lead                       | 88                                                            | 84   | 75-125 | 3 | 20 | 0.0772   | 0.0769   | 0 20      |
| Magnesium                  | 147*                                                          | 138* | 75-125 | 2 | 20 | 5.24     | 5.29     | 1 20      |
| Nickel                     | 107                                                           | 106  | 86-115 | 1 | 20 | 0.0340   | 0.0330   | 3 (1) 20  |
| Selenium                   | 99                                                            | 96   | 75-125 | 3 | 20 | N.D.     | N.D.     | 0 (1) 20  |
| Silver                     | 97                                                            | 94   | 75-125 | 3 | 20 | N.D.     | N.D.     | 0 (1) 20  |
| Vanadium                   | 112*                                                          | 110  | 90-111 | 2 | 20 | 0.0570   | 0.0559   | 2 20      |

|                            |                                                               |    |        |   |    |      |      |          |
|----------------------------|---------------------------------------------------------------|----|--------|---|----|------|------|----------|
| Batch number: 131915713003 | Sample number(s): 7121762-7121773 UNSPK: 7121764 BKG: 7121764 |    |        |   |    |      |      |          |
| Mercury                    | 93                                                            | 91 | 80-120 | 2 | 20 | N.D. | N.D. | 0 (1) 20 |

**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: BTEX 25-ml purge

\*- 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: 07/17/13 at 05:30 PM

Group Number: 1402816

### Surrogate Quality Control

Batch number: H131921AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 7121762 | 112                  | 107                   | 94         | 100                  |
| 7121763 | 113                  | 106                   | 94         | 99                   |
| 7121764 | 112                  | 105                   | 94         | 99                   |
| 7121765 | 112                  | 105                   | 95         | 99                   |
| 7121766 | 114                  | 105                   | 95         | 100                  |
| 7121767 | 112                  | 108                   | 95         | 101                  |
| 7121768 | 113                  | 106                   | 93         | 98                   |
| 7121769 | 112                  | 104                   | 94         | 99                   |
| 7121770 | 112                  | 104                   | 93         | 99                   |
| 7121771 | 112                  | 107                   | 93         | 99                   |
| 7121772 | 112                  | 103                   | 94         | 99                   |
| 7121773 | 114                  | 107                   | 93         | 100                  |
| 7121774 | 113                  | 107                   | 93         | 99                   |
| Blank   | 111                  | 107                   | 94         | 99                   |
| LCS     | 112                  | 108                   | 96         | 102                  |
| MS      | 114                  | 104                   | 95         | 101                  |
| MSD     | 112                  | 104                   | 95         | 102                  |
| Limits: | 77-114               | 74-113                | 77-110     | 78-110               |

Analysis Name: PAHs in waters by SIM

Batch number: 13191WAK026

|         | Fluoranthene-d10 | Benzo(a)pyrene-d12 | 1-Methylnaphthalene-d10 |
|---------|------------------|--------------------|-------------------------|
| 7121762 | 98               | 83                 | 102                     |
| 7121763 | 101              | 95                 | 103                     |
| 7121764 | 86               | 57*                | 91                      |
| 7121765 | 91               | 69                 | 95                      |
| 7121766 | 95               | 74                 | 99                      |
| 7121767 | 82               | 77                 | 86                      |
| 7121768 | 90               | 90                 | 99                      |
| 7121769 | 69               | 46*                | 88                      |
| 7121770 | 88               | 90                 | 96                      |
| 7121771 | 94               | 77                 | 97                      |
| 7121772 | 97               | 91                 | 93                      |
| 7121773 | 87               | 84                 | 94                      |
| Blank   | 83               | 87                 | 88                      |
| LCS     | 98               | 108                | 104                     |
| LCSD    | 89               | 100                | 90                      |
| Limits: | 64-120           | 62-141             | 58-134                  |

\*- 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.

**Lancaster  
Laboratories**

Acct. # 14739

**For Eurofins Lancaster Laboratories use only**

Group # 1402816

Sample # 7121762-74

Instructions on reverse side correspond with circled numbers

1 of 2

|                                                   |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
|---------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-----------|--|--|-----------------------|--|--|--------|----------------------------------------------|--|------|--|--|--|---|--|--|
| 1 Client Information                              |  |  | 4 Matrix                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  | 5 Analyses Requested                                                                                                                                                                                                                    |  |  |           |  |  |                       |  |  |        | SCR#:                                        |  |      |  |  |  |   |  |  |
| Facility #/SID<br>MAYFLOWER PIPELINE INCIDENT     |  |  | <div><div><div><input type="checkbox"/> Sediment</div><div><input type="checkbox"/> Potable</div><div><input type="checkbox"/> Oil</div></div><div><div><input type="checkbox"/> Ground</div><div><input type="checkbox"/> NPDES</div><div><input type="checkbox"/></div></div><div><div><input checked="" type="checkbox"/> Surface</div><div><input type="checkbox"/> Air</div><div><input type="checkbox"/></div></div></div> <div>Total # of Containers</div> |  |  | Preservation Code                                                                                                                                                                                                                       |  |  |           |  |  |                       |  |  |        | Preservation Codes                           |  |      |  |  |  |   |  |  |
| Site Address<br>MAYFLOWER, AR                     |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | <div><div>H</div><div>N</div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>VOCS 8260</div> <div>PAHS 8270 by SEM</div> <div>LCRA METALS Cu, V, Ni, Mn</div> |  |  |           |  |  |                       |  |  |        | H = HCl T = Thiosulfate                      |  |      |  |  |  |   |  |  |
| Exxon/Mobil PM<br>SCOTT BUSHROE                   |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        | N = HNO <sub>3</sub> B = NaOH                |  |      |  |  |  |   |  |  |
| Consultant/Office<br>ARCADES                      |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        | S = H <sub>2</sub> SO <sub>4</sub> O = Other |  |      |  |  |  |   |  |  |
| Consultant PM<br>STEVE BARRICK                    |  |  | Consultant Phone #<br>919-202-6779                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  | <div>6 Remarks</div> <div>DATA ANALYSIS</div> <div>QUESTIONS:</div> <div>LYNDI MOTT</div>                                                                                                                                               |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
| Sampler<br>A. PARRINELLO / H. VAN ALLER           |  |  | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
| 2 Sample Identification                           |  |  | Collected                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  | Grab                                                                                                                                                                                                                                    |  |  | Composite |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
|                                                   |  |  | Date                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  | Time                                                                                                                                                                                                                                    |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
| WS-003 (SURFACE) 070913                           |  |  | 7/9/13                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  | 910                                                                                                                                                                                                                                     |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-002 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 935                                                                                                                                                                                                                                     |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-005 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1005                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-001 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1025                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-001 (0.5-1.0) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1030                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-004 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1035                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-004 (0.5-1.0) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1040                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-007 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1055                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-007 (0.5-1.0) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1100                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-006 (SURFACE) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1115                                                                                                                                                                                                                                    |  |  | X         |  |  |                       |  |  |        |                                              |  |      |  |  |  | X |  |  |
| WS-006 (0.5-1.0) 070913                           |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | 1120                                                                                                                                                                                                                                    |  |  | X         |  |  | X                     |  |  |        |                                              |  |      |  |  |  |   |  |  |
| Dup-WS-53-070913                                  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  | X         |  |  | X                     |  |  |        |                                              |  |      |  |  |  |   |  |  |
| 7 Turnaround Time Requested (TAT) (please circle) |  |  | Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | Date                                                                                                                                                                                                                                    |  |  | Time      |  |  | Received by           |  |  | Date   |                                              |  | Time |  |  |  |   |  |  |
| Standard 5 day 4 day                              |  |  | [Signature]                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  | 7/9/13                                                                                                                                                                                                                                  |  |  | 1300      |  |  | [Signature]           |  |  |        |                                              |  | 9    |  |  |  |   |  |  |
| 72 hour 48 hour 24 hour                           |  |  | Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | Date                                                                                                                                                                                                                                    |  |  | Time      |  |  | Received by           |  |  | Date   |                                              |  | Time |  |  |  |   |  |  |
|                                                   |  |  | Relinquished by                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  | Date                                                                                                                                                                                                                                    |  |  | Time      |  |  | Received by           |  |  | Date   |                                              |  | Time |  |  |  |   |  |  |
| 8 Data Package (circle if required)               |  |  | Relinquished by Commercial Carrier                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  | Date                                                                                                                                                                                                                                    |  |  | Time      |  |  | Received by           |  |  | Date   |                                              |  | Time |  |  |  |   |  |  |
| Type I - Full                                     |  |  | UPS                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  | FedEx X                                                                                                                                                                                                                                 |  |  | Other     |  |  | Branch 10/13          |  |  | 925    |                                              |  |      |  |  |  |   |  |  |
| Type VI (Raw Data)                                |  |  | Temperature Upon Receipt 0.4-1.9°C                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  | Custody Seals Intact? |  |  | Yes No |                                              |  |      |  |  |  |   |  |  |
| NJ Reduced                                        |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |
| Other                                             |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |                                                                                                                                                                                                                                         |  |  |           |  |  |                       |  |  |        |                                              |  |      |  |  |  |   |  |  |

# ExxonMobil Analysis Request/Chain of Custody



**Lancaster  
Laboratories**

Acct. # 14739 For Eurofins Lancaster Laboratories use only  
Group # 1402816 Sample # 7121762-74  
Instructions on reverse side correspond with circled numbers.

2 of 2

|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|----------------------------------------------------------------------|--|-------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|--|-------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------|--|------|--|------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>1 Client Information</b>                                          |  |                                           |          | <b>4 Matrix</b>                                                                                                                                                                                                                                                                                                                                   |                                       | <b>5 Analyses Requested</b>           |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  | <b>6 Remarks</b>                                                                                                                           |  |
| Facility #/SID<br><u>MAY FLOWER PIPELINE INCIDENT</u>                |  |                                           |          | <input type="checkbox"/> Sediment<br><input type="checkbox"/> Potable<br><input type="checkbox"/> Ground<br><input checked="" type="checkbox"/> Surface<br><input type="checkbox"/> Water<br><input type="checkbox"/> NPDES<br><input type="checkbox"/> Oil<br><input type="checkbox"/> Air<br>Total # of Containers <u>2</u><br>VOCs <u>8260</u> |                                       | <b>Preservation Code</b>              |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  | <b>Preservation Codes</b><br>H = HCl      T = Thiosulfate<br>N = HNO <sub>3</sub> B = NaOH<br>S = H <sub>2</sub> SO <sub>4</sub> O = Other |  |
| Site Address<br><u>MAY FLOWER, AR</u>                                |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| ExxonMobil PM<br><u>SCOTT BUSHROE</u>                                |  | Cost Center/AFE                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| Consultant/Office<br><u>ARCADIS</u>                                  |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| Consultant PM<br><u>STEVE BARRICK</u>                                |  | Consultant Phone #<br><u>919-202-6799</u> |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| Sampler<br><u>A. PAPPINELLO / H. VAN ALLER</u>                       |  |                                           |          | <b>3</b>                                                                                                                                                                                                                                                                                                                                          |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  | <b>DATA ANALYSES<br/>QUESTIONS:<br/><br/>LYNDE MOTT</b>                                                                                    |  |
| <b>2 Sample Identification</b>                                       |  | <b>Collected</b>                          |          | Grab<br><input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                       | Composite<br><input type="checkbox"/> |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  | Date                                      | Time     |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| <u>WS-TR-92-070913</u>                                               |  | <u>7/8/13</u>                             | <u>—</u> |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| <b>7 Turnaround Time Requested (TAT) (please circle)</b>             |  |                                           |          | Relinquished by <u>[Signature]</u><br>Relinquished by <u>[Signature]</u><br>Relinquished by <u>[Signature]</u><br>Relinquished by Commercial Carrier<br>UPS <u>  </u> FedEx <u>X</u> Other <u>  </u>                                                                                                                                              |                                       | Date                                  |  | Time                                |  | Received by <u>[Signature]</u><br>Received by <u>[Signature]</u><br>Received by <u>[Signature]</u><br>Received by <u>[Signature]</u> |  | Date |  | Time |  |  |  |                                                                                                                                            |  |
| Standard <u>5 day</u> 4 day                                          |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       | <u>7/9/13</u>                         |  | <u>1300</u>                         |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| 72 hour      48 hour      24 hour                                    |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
|                                                                      |  |                                           |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |
| <b>8 Data Package (circle if required)</b>                           |  | <b>EDD (circle if required)</b>           |          | Temperature Upon Receipt <u>0.4-1.9°C</u>                                                                                                                                                                                                                                                                                                         |                                       | Custody Seals Intact? <u>(Yes)</u> No |  | Date <u>7.10.13</u> Time <u>925</u> |  | (9)                                                                                                                                  |  |      |  |      |  |  |  |                                                                                                                                            |  |
| Type I - Full<br>Type VI (Raw Data)<br>NJ Reduced<br>Other <u>  </u> |  | Locus EIM (default)<br>Other <u>  </u>    |          |                                                                                                                                                                                                                                                                                                                                                   |                                       |                                       |  |                                     |  |                                                                                                                                      |  |      |  |      |  |  |  |                                                                                                                                            |  |



Rachel L. Kreamer

A# 14739

Gr# 1402816

Sampler 7121762-74

**From:** Mott, Lyndi [Lyndi.Mott@arcadis-us.com]  
**Sent:** Wednesday, July 10, 2013 12:44 PM  
**To:** Rachel L. Kreamer  
**Cc:** Kathy Klinefelter  
**Subject:** RE: TB collection date - Surface Waters received today

Rachel,

The Trip Blank should have a collection date of 7/9/13.

Thank you,  
Lyndi Mott

-----Original Message-----

**From:** Rachel L. Kreamer [mailto:RKreamer@lanasterlabs.com]  
**Sent:** Wednesday, July 10, 2013 11:39 AM  
**To:** Mott, Lyndi  
**Cc:** Kathy Klinefelter  
**Subject:** TB collection date - Surface Waters received today

Lyndi,

I attached the chains for the surface waters. The TB collection date is listed as 7/8/13 but 7/9/13 is used in the designation. Do you want the designation to be 7/9/13?

Thanks  
Rachel

-----Original Message-----

**From:** 39Scanner@lanasterlabs.com [mailto:39Scanner@lanasterlabs.com]  
**Sent:** Wednesday, July 10, 2013 12:35 PM  
**To:** Rachel L. Kreamer  
**Subject:**

This E-mail was sent from "RNP367EC2" (MP 4001/LD140).

Scan Date: 07.10.2013 12:34:38 (-0400)  
Queries to: 39Scanner@lanasterlabs.com

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Environmental Sample Administration  
Receipt Documentation Log

1402816

Client/Project:

Exxon mobil

Date of Receipt:

7.10.13

Time of Receipt:

925

Source Code:

50-1

Shipping Container Sealed:

YES

NO

Custody Seal Present \* :

YES

NO

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

Package:

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        | DH121          | 1.9              | TB                                    | WI                                             | Y                | B                              |          |
| 2        | ↓              | 0.4              | ↓                                     | ↓                                              | ↓                | ↓                              |          |
| 3        |                |                  |                                       |                                                |                  |                                |          |
| 4        |                |                  |                                       |                                                |                  |                                |          |
| 5        |                |                  |                                       |                                                |                  |                                |          |
| 6        |                |                  |                                       |                                                |                  |                                |          |

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

Paperwork Discrepancy/Unpacking Problems:

Unpacker Signature/Emp#:

Burchley Barclay<sup>2299</sup>

Date/Time:

7.10.13 945

Issued by Dept. 6042 Management

# Explanation of Symbols and Abbreviations

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

|                         |                                                                                                                                                                                                                                                                                                                                                             |                 |                                  |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|
| <b>RL</b>               | Reporting Limit                                                                                                                                                                                                                                                                                                                                             | <b>BMQL</b>     | Below Minimum Quantitation Level |
| <b>N.D.</b>             | none detected                                                                                                                                                                                                                                                                                                                                               | <b>MPN</b>      | Most Probable Number             |
| <b>TNTC</b>             | Too Numerous To Count                                                                                                                                                                                                                                                                                                                                       | <b>CP Units</b> | cobalt-chloroplatinate units     |
| <b>IU</b>               | International Units                                                                                                                                                                                                                                                                                                                                         | <b>NTU</b>      | nephelometric turbidity units    |
| <b>umhos/cm</b>         | micromhos/cm                                                                                                                                                                                                                                                                                                                                                | <b>ng</b>       | nanogram(s)                      |
| <b>C</b>                | degrees Celsius                                                                                                                                                                                                                                                                                                                                             | <b>F</b>        | degrees Fahrenheit               |
| <b>meq</b>              | milliequivalents                                                                                                                                                                                                                                                                                                                                            | <b>lb.</b>      | pound(s)                         |
| <b>g</b>                | gram(s)                                                                                                                                                                                                                                                                                                                                                     | <b>kg</b>       | kilogram(s)                      |
| <b>µg</b>               | microgram(s)                                                                                                                                                                                                                                                                                                                                                | <b>mg</b>       | milligram(s)                     |
| <b>mL</b>               | milliliter(s)                                                                                                                                                                                                                                                                                                                                               | <b>L</b>        | liter(s)                         |
| <b>m3</b>               | cubic meter(s)                                                                                                                                                                                                                                                                                                                                              | <b>µL</b>       | microliter(s)                    |
|                         |                                                                                                                                                                                                                                                                                                                                                             | <b>pg/L</b>     | picogram/liter                   |
| <b>&lt;</b>             | 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.                                                                                                                                                                                   |                 |                                  |
| <b>&gt;</b>             | greater than                                                                                                                                                                                                                                                                                                                                                |                 |                                  |
| <b>ppm</b>              | 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. |                 |                                  |
| <b>ppb</b>              | parts per billion                                                                                                                                                                                                                                                                                                                                           |                 |                                  |
| <b>Dry weight basis</b> | 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 |                                                         |
|--------------------|---------------------------------------------------------------------------|----------------------|---------------------------------------------------------|
| <b>A</b>           | TIC is a possible aldol-condensation product                              | <b>B</b>             | Value is $<$ CRDL, but $\geq$ IDL                       |
| <b>B</b>           | Analyte was also detected in the blank                                    | <b>E</b>             | Estimated due to interference                           |
| <b>C</b>           | Pesticide result confirmed by GC/MS                                       | <b>M</b>             | Duplicate injection precision not met                   |
| <b>D</b>           | Compound quantitated on a diluted sample                                  | <b>N</b>             | Spike sample not within control limits                  |
| <b>E</b>           | Concentration exceeds the calibration range of the instrument             | <b>S</b>             | Method of standard additions (MSA) used for calculation |
| <b>N</b>           | Presumptive evidence of a compound (TICs only)                            | <b>U</b>             | Compound was not detected                               |
| <b>P</b>           | Concentration difference between primary and confirmation columns $>25\%$ | <b>W</b>             | Post digestion spike out of control limits              |
| <b>U</b>           | Compound was not detected                                                 | <b>*</b>             | Duplicate analysis not within control limits            |
| <b>X,Y,Z</b>       | Defined in case narrative                                                 | <b>+</b>             | 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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