

## ANALYTICAL RESULTS

Prepared by:

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Lancaster, PA 17601

Prepared for:

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

April 19, 2013

Project: Mayflower, AR Pipeline Incident

Submittal Date: 04/18/2013

Group Number: 1383730

SDG: PEG42

PO Number: 4510076246

Release Number: MAYFLOWER 1406

State of Sample Origin: AR

Client Sample DescriptionLancaster Labs (LLI) #

|                                              |         |
|----------------------------------------------|---------|
| WS-003(SURFACE)041713 Grab Surface Water     | 7026228 |
| WS-002(SURFACE)041713 Grab Surface Water     | 7026229 |
| WS-001-BKG(SURFACE)041713 Grab Surface Water | 7026230 |
| WS-005(SURFACE)041713 Grab Surface Water     | 7026231 |
| WS-008(SURFACE)041713 Grab Surface Water     | 7026232 |
| WS-001(SURFACE)041713 Grab Surface Water     | 7026233 |
| WS-001(0.5-1.0)041713 Grab Surface Water     | 7026234 |
| WS-004(SURFACE)041713 Grab Surface Water     | 7026235 |
| WS-004(0.5-1.0)041713 Grab Surface Water     | 7026236 |
| WS-018(1.5-2.0)041713 Grab Surface Water     | 7026237 |
| WS-018(7.0-7.5)041713 Grab Surface Water     | 7026238 |
| WS-007(SURFACE)041713 Grab Surface Water     | 7026239 |
| WS-007(0.5-1.0)041713 Grab Surface Water     | 7026240 |
| WS-006(SURFACE)041713 Grab Surface Water     | 7026241 |
| WS-006(0.5-1.0)041713 Grab Surface Water     | 7026242 |
| WS-019(SURFACE)041713 Grab Surface Water     | 7026243 |
| FB-02-041713 Grab Surface Water              | 7026244 |
| WS-DUP08-041713 Grab Surface Water           | 7026245 |
| WS-TB14-041713 Water                         | 7026246 |

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

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Attn: Stephen Barrick

Attn: Lyndi Mott

ELECTRONIC      ExxonMobil

Attn: Scott Bushroe

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ELECTRONIC      ExxonMobil Pipeline Company

Attn: Timothy S. Martin

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ELECTRONIC      ExxonMobil

Attn: Michael J. Firth

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Respectfully Submitted,

Katherine A. Klinefelter  
Principal Specialist

(717) 556-7256

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Project Name: Mayflower, AR Pipeline Incident  
LLI Group #: 1383730

**General Comments:**

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

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

Project specific QC samples are not included in this data set

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

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

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

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

Batch #: 13108WAC026 (Sample number(s): 7026228-7026243, 7026245)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 1-Methylnaphthalene, Acenaphthylene, Fluorene, Phenanthrene, Anthracene, Fluoranthene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) 7026233, 7026235, 7026236, 7026239, 7026240, 7026243

Sample #s: 7026235, 7026236, 7026239, 7026240, 7026243

The percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported. 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.

Sample #s: 7026233

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 #: 131081848002 (Sample number(s): 7026228-7026245 UNSPK: 7026234 BKG: 7026234)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Nickel, Vanadium

**Sample Description:** WS-003 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026228  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 08:45 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17003 SDG#: PEG42-01

| 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) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026228  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 08:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17003 SDG#: PEG42-01

| 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                  | 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               |
| <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                 | 14.7               | 0.064                               | 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                | 0.0226             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.24               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-003 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026228  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 08:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17003 SDG#: PEG42-01

| 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.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.61               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0019 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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 VOCs 8260 | SW-846 8260B 25mL purge | 1      | I131081AA    | 04/18/2013 12:32       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep            | SW-846 5030B            | 1      | I131081AA    | 04/18/2013 12:32       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM           | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 01:04       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)      | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3         | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07046   | Barium                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07049   | Cadmium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 01750   | Calcium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07051   | Chromium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07055   | Lead                            | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 01757   | Magnesium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07061   | Nickel                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07036   | Selenium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07066   | Silver                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 07071   | Vanadium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:05       | John P Hook        | 1               |
| 00259   | Mercury                         | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 09:52       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)   | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest              | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-002 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026229  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 09:20 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17002 SDG#: PEG42-02

| 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) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026229  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013 09:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17002 SDG#: PEG42-02

| 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           | 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               |
| Metals  |                           | SM 2340 B-1997    | mg/l               | mg/l                                | mg/l                              |                 |
| 06256   | Total Hardness as CaCO3   | 471-34-1          | 14.0               | 0.064                               | 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         | 0.0187             | 0.00033                             | 0.0050                            | 1               |
| 07049   | Cadmium                   | 7440-43-9         | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750   | Calcium                   | 7440-70-2         | 3.06               | 0.0640                              | 0.200                             | 1               |

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



**Sample Description:** WS-002 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026229  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 09:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17002 SDG#: PEG42-02

| 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           | 0.0013 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.54               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | N.D.               | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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 VOCs 8260 | SW-846 8260B 25mL purge | 1      | I131081AA    | 04/18/2013 12:53       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep            | SW-846 5030B            | 1      | I131081AA    | 04/18/2013 12:53       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM           | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 01:32       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)      | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3         | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07046   | Barium                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07049   | Cadmium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 01750   | Calcium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07051   | Chromium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07055   | Lead                            | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 01757   | Magnesium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07061   | Nickel                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07036   | Selenium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07066   | Silver                          | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 07071   | Vanadium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:08       | John P Hook        | 1               |
| 00259   | Mercury                         | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 09:54       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)   | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest              | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-001-BKG(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026230  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 09:45 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17001 SDG#: PEG42-03

| 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-001-BKG(SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026230  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 09:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17001 SDG#: PEG42-03

| 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                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 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                 | 28.9               | 0.064                               | 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                | 0.0415             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 7.90               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-001-BKG(SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026230  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 09:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17001 SDG#: PEG42-03

| 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>                       |                 |
| 07051         | Chromium      | 7440-47-3           | N.D.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.23               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0022 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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      | I131081AA    | 04/18/2013 19:40       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | I131081AA    | 04/18/2013 19:40       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 01:59       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:19       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 09:56       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-005(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026231  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 10:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17005 SDG#: PEG42-04

| 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-005(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026231  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 10:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17005 SDG#: PEG42-04

| 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                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 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>                         | <b>mg/l</b>                       |                 |
| 06256         | Total Hardness as CaCO3   | 471-34-1                 | 17.1               | 0.064                               | 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                | 0.0163             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.90               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-005(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026231  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 10:15 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17005 SDG#: PEG42-04

| 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.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.78               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0018 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 19:04       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 19:04       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 02:26       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:23       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 09:58       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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



Sample Description: WS-008 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026232  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17008 SDG#: PEG42-05

| 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           | 3.5 J              | 3.0                                 | 5.0                               | 1               |
| 02898   | Allyl Chloride              | 107-05-1          | N.D.               | 0.1                                 | 0.5                               | 1               |
| 02898   | Benzene                     | 71-43-2           | 0.5                | 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           | 0.3 J              | 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           | 1.2                | 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          | 0.2 J              | 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-008 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026232  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17008 SDG#: PEG42-05

| 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                 | 0.7                | 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                  | 0.2 J              | 0.1                                 | 0.5                               | 1               |
| 02898         | 1,3,5-Trimethylbenzene    | 108-67-8                 | 0.1 J              | 0.1                                 | 0.5                               | 1               |
| 02898         | Vinyl Chloride            | 75-01-4                  | N.D.               | 0.1                                 | 0.5                               | 1               |
| 02898         | Xylene (Total)            | 1330-20-7                | 0.9                | 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                 | 0.016 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                 | 27.2               | 0.064                               | 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                | 0.0513             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 6.04               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-008 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026232  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 10:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17008 SDG#: PEG42-05

| 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           | 0.0053 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.95               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0052 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0072             | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 13:31       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 13:31       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 02:54       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:26       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:00       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-001(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026233  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:30 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17011 SDG#: PEG42-06

| 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-001(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026233  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17011 SDG#: PEG42-06

| 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                 | 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>                       |                 |
| 06256                                                                                                                                                    | Total Hardness as CaCO <sub>3</sub> | 471-34-1                 | 15.5               | 0.064                               | 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                | 0.0286             | 0.00033                             | 0.0050                            | 1               |

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

**Sample Description:** WS-001(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026233  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17011 SDG#: PEG42-06

| 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>                       |                 |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 3.45               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0022 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.68               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0020 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0020 J           | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 13:53       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 13:53       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 03:21       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:30       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:02       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-001(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026234  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:35 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17012 SDG#: PEG42-07

| 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           | 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)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026234  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:35 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17012 SDG#: PEG42-07

| 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                 | 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               |
| <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                 | 15.7               | 0.064                               | 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                | 0.0339             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.46               | 0.0640                              | 0.200                             | 1               |

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



**Sample Description:** WS-001(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026234  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 12:35 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17012 SDG#: PEG42-07

| 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           | 0.0025 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.72               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0032 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0030 J           | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 18:20       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 18:20       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 03:49       | Holly Berry        | 1               |
| 10470   | BNH Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 18:43       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:04       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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



**Sample Description:** WS-004(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026235  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:05 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17041 SDG#: PEG42-08

| 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           | 3.1 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-004(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026235  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17041 SDG#: PEG42-08

| 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                               | 0.050                             | 1               |
| 08357        | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Benzo(a)pyrene            | 50-32-8                  | 0.034 J            | 0.010                               | 0.050                             | 1               |
| 08357        | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Chrysene                  | 218-01-9                 | 0.013 J            | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357        | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357        | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357        | Pyrene                    | 129-00-0                 | 0.014 J            | 0.010                               | 0.050                             | 1               |

The percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported.

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> |      |
| 06256         | Total Hardness as CaCO <sub>3</sub> | 471-34-1    | 22.8        | 0.064       | 0.20 |

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

**Sample Description:** WS-004 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026235  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17041 SDG#: PEG42-08

| 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>                       |                 |
| 07035         | Arsenic       | 7440-38-2           | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium        | 7440-39-3           | 0.101              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 4.68               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0118 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0107 J           | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.69               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0098 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0165             | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 18:42       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 18:42       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 04:16       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:33       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:06       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertzt     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-004(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026236  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17042 SDG#: PEG42-09

| 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           | 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(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026236  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:10 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17042 SDG#: PEG42-09

| 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                 | 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                  | 0.021 J            | 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 percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported.

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> |      |
| 06256         | Total Hardness as CaCO3 | 471-34-1    | 22.9        | 0.064       | 0.20 |

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

**Sample Description:** WS-004(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026236  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:10 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17042 SDG#: PEG42-09

| 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>                       |                 |
| 07035         | Arsenic       | 7440-38-2           | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium        | 7440-39-3           | 0.101              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 4.55               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0121 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0085 J           | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.79               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0102             | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0177             | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 14:15       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 14:15       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 04:44       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:37       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:08       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertzt     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-018(1.5-2.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026237  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17181 SDG#: PEG42-10

| 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-018(1.5-2.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026237  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17181 SDG#: PEG42-10

| 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                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 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                 | 17.0               | 0.064                               | 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                | 0.0262             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.73               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-018(1.5-2.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026237  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:20 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17181 SDG#: PEG42-10

| 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.               | 0.0011                              | 0.0150                            | 1               |
| 07055                | Lead               | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757                | Magnesium          | 7439-95-4           | 1.88               | 0.0606                              | 0.100                             | 1               |
| 07061                | Nickel             | 7440-02-0           | 0.0022 J           | 0.0011                              | 0.0100                            | 1               |
| 07036                | Selenium           | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066                | Silver             | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071                | Vanadium           | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 0.00020                           | 1               |
| <b>Wet Chemistry</b> |                    |                     |                    |                                     |                                   |                 |
|                      |                    | <b>EPA 1664A</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 08079                | HEM (oil & grease) | n.a.                | N.D.               | 1.4                                 | 5.0                               | 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      | C131081AA    | 04/18/2013 14:38       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 14:38       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 05:11       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:41       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:10       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |
| 08079   | HEM (oil & grease)             | EPA 1664A               | 1      | 13108807902A | 04/18/2013 16:34       | Michelle L Lalli   | 1               |

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

**Sample Description:** WS-018(7.0-7.5)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026238  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17182 SDG#: PEG42-11

| 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-018(7.0-7.5)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026238  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17182 SDG#: PEG42-11

| 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                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 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                 | 17.1               | 0.064                               | 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                | 0.0259             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.75               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-018(7.0-7.5)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026238  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:30 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17182 SDG#: PEG42-11

| 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           | 0.0011 J           | 0.0011                              | 0.0150                            | 1               |
| 07055                | Lead               | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757                | Magnesium          | 7439-95-4           | 1.89               | 0.0606                              | 0.100                             | 1               |
| 07061                | Nickel             | 7440-02-0           | 0.0015 J           | 0.0011                              | 0.0100                            | 1               |
| 07036                | Selenium           | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066                | Silver             | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071                | Vanadium           | 7440-62-2           | N.D.               | 0.0013                              | 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.               | 0.000070                            | 0.00020                           | 1               |
| <b>Wet Chemistry</b> |                    | <b>EPA 1664A</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 08079                | HEM (oil & grease) | n.a.                | N.D.               | 1.4                                 | 5.0                               | 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      | C131081AA    | 04/18/2013 15:00       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 15:00       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 05:39       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:44       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:16       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |
| 08079   | HEM (oil & grease)             | EPA 1664A               | 1      | 13108807902A | 04/18/2013 16:34       | Michelle L Lalli   | 1               |

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

**Sample Description:** WS-007(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026239  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:40 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17071 SDG#: PEG42-12

| 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-007 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026239  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17071 SDG#: PEG42-12

| 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                  | 0.017 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                 | 0.044 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                 | 0.013 J            | 0.010                               | 0.051                             | 1               |
| 08357        | Chrysene                  | 218-01-9                 | 0.030 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                 | 0.14               | 0.010                               | 0.051                             | 1               |
| 08357        | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357        | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | 0.011 J            | 0.010                               | 0.051                             | 1               |
| 08357        | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357        | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357        | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357        | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.051                             | 1               |
| 08357        | Pyrene                    | 129-00-0                 | 0.099              | 0.010                               | 0.051                             | 1               |

The percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported.

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> |      |
| 06256         | Total Hardness as CaCO <sub>3</sub> | 471-34-1    | 22.5        | 0.064       | 0.20 |

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



**Sample Description:** WS-007 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026239  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:40 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17071 SDG#: PEG42-12

| 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>                       |                 |
| 07035         | Arsenic       | 7440-38-2           | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium        | 7440-39-3           | 0.114              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 4.78               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0092 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0121 J           | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.56               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0085 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0146             | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 15:22       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 15:22       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 06:06       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:48       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:24       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertzt     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-007(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026240  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:45 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17072 SDG#: PEG42-13

| CAT No. | Analysis Name               | CAS Number        | As Received Result | As Received Method Detection Limit* | As Received Limit of Quantitation | Dilution Factor |
|---------|-----------------------------|-------------------|--------------------|-------------------------------------|-----------------------------------|-----------------|
| GC/MS   | Volatiles                   | SW-846 8260B 25mL | ug/l               | ug/l                                | ug/l                              |                 |
|         | purge                       |                   |                    |                                     |                                   |                 |
| 02898   | Acetone                     | 67-64-1           | 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-007(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026240  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17072 SDG#: PEG42-13

| 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                 | 0.016 J            | 0.010                               | 0.051                             | 1               |
| 08357        | Anthracene                | 120-12-7                 | 0.054              | 0.010                               | 0.051                             | 1               |
| 08357        | Benzo(a)anthracene        | 56-55-3                  | 0.073              | 0.010                               | 0.051                             | 1               |
| 08357        | Benzo(a)pyrene            | 50-32-8                  | 0.045 J            | 0.010                               | 0.051                             | 1               |
| 08357        | Benzo(b)fluoranthene      | 205-99-2                 | 0.21               | 0.010                               | 0.051                             | 1               |
| 08357        | Benzo(g,h,i)perylene      | 191-24-2                 | 0.048 J            | 0.010                               | 0.051                             | 1               |
| 08357        | Benzo(k)fluoranthene      | 207-08-9                 | 0.065              | 0.010                               | 0.051                             | 1               |
| 08357        | Chrysene                  | 218-01-9                 | 0.20               | 0.010                               | 0.051                             | 1               |
| 08357        | Dibenz(a,h)anthracene     | 53-70-3                  | 0.012 J            | 0.010                               | 0.051                             | 1               |
| 08357        | Fluoranthene              | 206-44-0                 | 0.50               | 0.010                               | 0.051                             | 1               |
| 08357        | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.051                             | 1               |
| 08357        | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | 0.056              | 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                  | 0.12               | 0.030                               | 0.051                             | 1               |
| 08357        | Pyrene                    | 129-00-0                 | 0.37               | 0.010                               | 0.051                             | 1               |

The percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported.

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> |      |
| 06256         | Total Hardness as CaCO <sub>3</sub> | 471-34-1    | 25.3        | 0.064       | 0.20 |

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

**Sample Description:** WS-007(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026240  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 13:45 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17072 SDG#: PEG42-13

| 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>                       |                 |
| 07035         | Arsenic       | 7440-38-2           | N.D.               | 0.0068                              | 0.0200                            | 1               |
| 07046         | Barium        | 7440-39-3           | 0.127              | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium       | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium       | 7440-70-2           | 5.33               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium      | 7440-47-3           | 0.0127 J           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | 0.0137 J           | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 2.90               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0108             | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0189             | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 16:29       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 16:29       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 06:34       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 19:52       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:26       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertzt     | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-006 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026241  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 14:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17061 SDG#: PEG42-14

| 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           | 0.1 J              | 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) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026241  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 14:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17061 SDG#: PEG42-14

| 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                 | 0.1 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                  | 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               |
| <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                 | 17.2               | 0.064                               | 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                | 0.0144             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.90               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-006 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026241  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 14:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17061 SDG#: PEG42-14

| 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.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.81               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0020 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0014 J           | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 16:52       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 16:52       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 07:01       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:02       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:28       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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



**Sample Description:** WS-006(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026242  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 14:05 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17062 SDG#: PEG42-15

| 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)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026242  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 14:05 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17062 SDG#: PEG42-15

| 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               |
| <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                 | 17.6               | 0.064                               | 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                | 0.0272             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.91               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-006(0.5-1.0)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

**LLI Sample #** WW 7026242  
**LLI Group #** 1383730  
**Account #** 14739

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

**Collected:** 04/17/2013 14:05 by JL

ExxonMobil

Mobil Pipeline Company

**Submitted:** 04/18/2013 09:15

PO Box 4416

**Reported:** 04/19/2013 13:51

Houston TX 77210-4416

17062 SDG#: PEG42-15

| 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           | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead          | 7439-92-1           | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium     | 7439-95-4           | 1.91               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel        | 7440-02-0           | 0.0026 J           | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium      | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver        | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium      | 7440-62-2           | 0.0035 J           | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 17:14       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 17:14       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 07:29       | Holly Berry        | 1               |
| 10470   | BNW Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:06       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:31       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

**Sample Description:** WS-019(SURFACE)041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026243  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 15:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17019 SDG#: PEG42-16

| 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           | 4.6 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           | 1.4 J              | 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-019 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026243  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 15:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17019 SDG#: PEG42-16

| 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.               | 0.011                               | 0.053                             | 1               |
| 08357        | Acenaphthylene            | 208-96-8                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Anthracene                | 120-12-7                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Chrysene                  | 218-01-9                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Dibenz(a,h)anthracene     | 53-70-3                  | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Fluoranthene              | 206-44-0                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Fluorene                  | 86-73-7                  | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | 1-Methylnaphthalene       | 90-12-0                  | 0.015 J            | 0.011                               | 0.053                             | 1               |
| 08357        | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.011                               | 0.053                             | 1               |
| 08357        | Naphthalene               | 91-20-3                  | N.D.               | 0.032                               | 0.053                             | 1               |
| 08357        | Phenanthrene              | 85-01-8                  | N.D.               | 0.032                               | 0.053                             | 1               |
| 08357        | Pyrene                    | 129-00-0                 | N.D.               | 0.011                               | 0.053                             | 1               |

The percent recoveries for several compounds in the LCS/LCSD associated with this sample were outside QC specification high. Any detected compounds would be biased slightly high. The client was contacted and the data was reported.

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> |      |
| 06256         | Total Hardness as CaCO <sub>3</sub> | 471-34-1    | 45.6        | 0.064       | 0.20 |

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

**Sample Description:** WS-019 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026243  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 15:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17019 SDG#: PEG42-16

| 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>                       |                 |
| 07035                | Arsenic            | 7440-38-2           | 0.0091 J           | 0.0068                              | 0.0200                            | 1               |
| 07046                | Barium             | 7440-39-3           | 0.151              | 0.00033                             | 0.0050                            | 1               |
| 07049                | Cadmium            | 7440-43-9           | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750                | Calcium            | 7440-70-2           | 11.8               | 0.0640                              | 0.200                             | 1               |
| 07051                | Chromium           | 7440-47-3           | 0.0126 J           | 0.0011                              | 0.0150                            | 1               |
| 07055                | Lead               | 7439-92-1           | 0.0086 J           | 0.0051                              | 0.0150                            | 1               |
| 01757                | Magnesium          | 7439-95-4           | 3.92               | 0.0606                              | 0.100                             | 1               |
| 07061                | Nickel             | 7440-02-0           | 0.010 J            | 0.0011                              | 0.0100                            | 1               |
| 07036                | Selenium           | 7782-49-2           | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066                | Silver             | 7440-22-4           | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071                | Vanadium           | 7440-62-2           | 0.0162             | 0.0013                              | 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.               | 0.000070                            | 0.00020                           | 1               |
| <b>Wet Chemistry</b> |                    |                     |                    |                                     |                                   |                 |
|                      |                    | <b>EPA 1664A</b>    | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 08079                | HEM (oil & grease) | n.a.                | N.D.               | 1.4                                 | 5.0                               | 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      | C131081AA    | 04/18/2013 17:36       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 17:36       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 07:56       | Holly Berry        | 1               |
| 10470   | BNA Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:10       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:33       | Damary Valentin    | 1               |

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

Sample Description: WS-019 (SURFACE) 041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026243  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013 15:00 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17019 SDG#: PEG42-16

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name                 | Method       | Trial# | Batch#       | Analysis Date and Time | Analyst           | Dilution Factor |
|---------|-------------------------------|--------------|--------|--------------|------------------------|-------------------|-----------------|
| 01848   | WW SW846 ICP Digest (tot rec) | SW-846 3005A | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest            | SW-846 7470A | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan | 1               |
| 08079   | HEM (oil & grease)            | EPA 1664A    | 1      | 13108807902A | 04/18/2013 16:34       | Michelle L Lalli  | 1               |

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



Sample Description: FB-02-041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026244  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013 15:35 by JL

ExxonMobil

Mobil Pipeline Company

Submitted: 04/18/2013 09:15

PO Box 4416

Reported: 04/19/2013 13:51

Houston TX 77210-4416

17FB2 SDG#: PEG42-17FB

| 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>SM 2340 B-1997</b>               |            | <b>mg/l</b>        | <b>mg/l</b>                         | <b>mg/l</b>                       |                 |
| 06256         | Total Hardness as CaCO <sub>3</sub> | 471-34-1   | N.D.               | 0.064                               | 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  | 0.00059 J          | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                             | 7440-43-9  | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                             | 7440-70-2  | N.D.               | 0.0640                              | 0.200                             | 1               |
| 07051         | Chromium                            | 7440-47-3  | N.D.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead                                | 7439-92-1  | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium                           | 7439-95-4  | N.D.               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel                              | 7440-02-0  | N.D.               | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium                            | 7782-49-2  | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver                              | 7440-22-4  | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium                            | 7440-62-2  | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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 |
|---------|-------------------------------------|----------------|--------|--------------|------------------------|-------------------|-----------------|
| 06256   | Total Hardness as CaCO <sub>3</sub> | SM 2340 B-1997 | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady   | 1               |
| 07035   | Arsenic                             | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07046   | Barium                              | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07049   | Cadmium                             | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 01750   | Calcium                             | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07051   | Chromium                            | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07055   | Lead                                | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 01757   | Magnesium                           | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07061   | Nickel                              | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07036   | Selenium                            | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07066   | Silver                              | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 07071   | Vanadium                            | SW-846 6010B   | 1      | 131081848002 | 04/18/2013 20:13       | John P Hook       | 1               |
| 00259   | Mercury                             | SW-846 7470A   | 1      | 131085713002 | 04/19/2013 10:35       | Damary Valentin   | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)       | SW-846 3005A   | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz     | 1               |
| 05713   | WW SW846 Hg Digest                  | SW-846 7470A   | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan | 1               |

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

**Sample Description:** WS-DUP08-041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026245  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17DU8 SDG#: PEG42-18FD

| 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-DUP08-041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026245  
LLI Group # 1383730  
Account # 14739

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

Collected: 04/17/2013 by JL

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17DU8 SDG#: PEG42-18FD

| 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                               | 0.050                             | 1               |
| 08357         | Acenaphthylene            | 208-96-8                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Anthracene                | 120-12-7                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)anthracene        | 56-55-3                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(a)pyrene            | 50-32-8                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(b)fluoranthene      | 205-99-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(g,h,i)perylene      | 191-24-2                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Benzo(k)fluoranthene      | 207-08-9                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Chrysene                  | 218-01-9                 | N.D.               | 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                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Fluorene                  | 86-73-7                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Indeno(1,2,3-cd)pyrene    | 193-39-5                 | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 1-Methylnaphthalene       | 90-12-0                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | 2-Methylnaphthalene       | 91-57-6                  | N.D.               | 0.010                               | 0.050                             | 1               |
| 08357         | Naphthalene               | 91-20-3                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Phenanthrene              | 85-01-8                  | N.D.               | 0.030                               | 0.050                             | 1               |
| 08357         | Pyrene                    | 129-00-0                 | N.D.               | 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                 | 17.1               | 0.064                               | 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                | 0.0167             | 0.00033                             | 0.0050                            | 1               |
| 07049         | Cadmium                   | 7440-43-9                | N.D.               | 0.00036                             | 0.0050                            | 1               |
| 01750         | Calcium                   | 7440-70-2                | 3.91               | 0.0640                              | 0.200                             | 1               |

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

**Sample Description:** WS-DUP08-041713 Grab Surface Water  
Mayflower, AR  
Pipeline Incident

**LLI Sample #** WW 7026245  
**LLI Group #** 1383730  
**Account #** 14739

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

**Collected:** 04/17/2013 by JL

ExxonMobil

Mobil Pipeline Company

**Submitted:** 04/18/2013 09:15

PO Box 4416

**Reported:** 04/19/2013 13:51

Houston TX 77210-4416

17DU8 SDG#: PEG42-18FD

| 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.               | 0.0011                              | 0.0150                            | 1               |
| 07055         | Lead                | 7439-92-1  | N.D.               | 0.0051                              | 0.0150                            | 1               |
| 01757         | Magnesium           | 7439-95-4  | 1.78               | 0.0606                              | 0.100                             | 1               |
| 07061         | Nickel              | 7440-02-0  | N.D.               | 0.0011                              | 0.0100                            | 1               |
| 07036         | Selenium            | 7782-49-2  | N.D.               | 0.0075                              | 0.0200                            | 1               |
| 07066         | Silver              | 7440-22-4  | N.D.               | 0.0012                              | 0.0050                            | 1               |
| 07071         | Vanadium            | 7440-62-2  | N.D.               | 0.0013                              | 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.               | 0.000070                            | 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      | C131081AA    | 04/18/2013 17:58       | Kerri E Legerlotz  | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B            | 1      | C131081AA    | 04/18/2013 17:58       | Kerri E Legerlotz  | 1               |
| 08357   | PAHs in waters by SIM          | SW-846 8270C SIM        | 1      | 13108WAC026  | 04/19/2013 08:24       | Holly Berry        | 1               |
| 10470   | BNP Water Extraction (SIM)     | SW-846 3510C            | 1      | 13108WAC026  | 04/18/2013 17:15       | Nicholas W Shroyer | 1               |
| 06256   | Total Hardness as CaCO3        | SM 2340 B-1997          | 1      | 131096256001 | 04/19/2013 05:14       | Deborah A Krady    | 1               |
| 07035   | Arsenic                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07046   | Barium                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07049   | Cadmium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 01750   | Calcium                        | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07051   | Chromium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07055   | Lead                           | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 01757   | Magnesium                      | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07061   | Nickel                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07036   | Selenium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07066   | Silver                         | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 07071   | Vanadium                       | SW-846 6010B            | 1      | 131081848002 | 04/18/2013 20:17       | John P Hook        | 1               |
| 00259   | Mercury                        | SW-846 7470A            | 1      | 131085713002 | 04/19/2013 10:41       | Damary Valentin    | 1               |
| 01848   | WW SW846 ICP Digest (tot rec)  | SW-846 3005A            | 1      | 131081848002 | 04/18/2013 11:00       | James L Mertz      | 1               |
| 05713   | WW SW846 Hg Digest             | SW-846 7470A            | 1      | 131085713002 | 04/18/2013 16:45       | Nelli S Markaryan  | 1               |

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

Sample Description: WS-TB14-041713 Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026246  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17T14 SDG#: PEG42-19TB\*

| 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-TB14-041713 Water  
Mayflower, AR  
Pipeline Incident

LLI Sample # WW 7026246  
LLI Group # 1383730  
Account # 14739

Project Name: Mayflower, AR Pipeline Incident

Collected: 04/17/2013

ExxonMobil

Submitted: 04/18/2013 09:15

Mobil Pipeline Company

Reported: 04/19/2013 13:51

PO Box 4416

Houston TX 77210-4416

17T14 SDG#: PEG42-19TB\*

| 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      | C131081AA | 04/18/2013 11:31       | Kerri E Legerlotz | 1               |
| 01163   | GC/MS VOA Water Prep           | SW-846 5030B               | 1      | C131081AA | 04/18/2013 11:31       | Kerri E Legerlotz | 1               |

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

## Quality Control Summary

Client Name: ExxonMobil  
Reported: 04/19/13 at 01:51 PM

Group Number: 1383730

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: C131081AA     | Sample number(s): 7026231-7026243, 7026245-7026246 |                    |                  |                     |                 |                  |                        |            |                |
| Acetone                     | N.D.                                               | 3.0                | 5.0              | ug/l                | 110             |                  | 73-135                 |            |                |
| Allyl Chloride              | N.D.                                               | 0.1                | 0.5              | ug/l                | 108             |                  | 61-130                 |            |                |
| Benzene                     | N.D.                                               | 0.1                | 0.5              | ug/l                | 104             |                  | 80-120                 |            |                |
| Bromobenzene                | N.D.                                               | 0.1                | 0.5              | ug/l                | 104             |                  | 80-120                 |            |                |
| Bromochloromethane          | N.D.                                               | 0.1                | 0.5              | ug/l                | 111             |                  | 80-125                 |            |                |
| Bromodichloromethane        | N.D.                                               | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |
| Bromoform                   | N.D.                                               | 0.1                | 0.5              | ug/l                | 101             |                  | 63-132                 |            |                |
| Bromomethane                | N.D.                                               | 0.1                | 0.5              | ug/l                | 106             |                  | 38-146                 |            |                |
| 2-Butanone                  | N.D.                                               | 1.0                | 5.0              | ug/l                | 127             |                  | 70-130                 |            |                |
| n-Butylbenzene              | N.D.                                               | 0.1                | 0.5              | ug/l                | 101             |                  | 80-120                 |            |                |
| sec-Butylbenzene            | N.D.                                               | 0.1                | 0.5              | ug/l                | 102             |                  | 80-120                 |            |                |
| tert-Butylbenzene           | N.D.                                               | 0.1                | 0.5              | ug/l                | 100             |                  | 80-120                 |            |                |
| Carbon Tetrachloride        | N.D.                                               | 0.1                | 0.5              | ug/l                | 111             |                  | 74-133                 |            |                |
| Chlorobenzene               | N.D.                                               | 0.1                | 0.5              | ug/l                | 106             |                  | 80-120                 |            |                |
| Chloroethane                | N.D.                                               | 0.1                | 0.5              | ug/l                | 104             |                  | 67-124                 |            |                |
| Chloroform                  | N.D.                                               | 0.1                | 0.5              | ug/l                | 110             |                  | 80-120                 |            |                |
| Chloromethane               | N.D.                                               | 0.2                | 0.5              | ug/l                | 97              |                  | 55-135                 |            |                |
| 2-Chlorotoluene             | N.D.                                               | 0.1                | 0.5              | ug/l                | 102             |                  | 80-120                 |            |                |
| 4-Chlorotoluene             | N.D.                                               | 0.1                | 0.5              | ug/l                | 102             |                  | 80-120                 |            |                |
| 1,2-Dibromo-3-chloropropane | N.D.                                               | 0.2                | 0.5              | ug/l                | 118             |                  | 57-141                 |            |                |
| Dibromochloromethane        | N.D.                                               | 0.1                | 0.5              | ug/l                | 102             |                  | 80-126                 |            |                |
| 1,2-Dibromoethane           | N.D.                                               | 0.1                | 0.5              | ug/l                | 106             |                  | 80-120                 |            |                |
| Dibromomethane              | N.D.                                               | 0.1                | 0.5              | ug/l                | 107             |                  | 80-120                 |            |                |
| 1,2-Dichlorobenzene         | N.D.                                               | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| 1,3-Dichlorobenzene         | N.D.                                               | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| 1,4-Dichlorobenzene         | N.D.                                               | 0.1                | 0.5              | ug/l                | 105             |                  | 80-112                 |            |                |
| Dichlorodifluoromethane     | N.D.                                               | 0.1                | 0.5              | ug/l                | 106             |                  | 39-120                 |            |                |
| 1,1-Dichloroethane          | N.D.                                               | 0.1                | 0.5              | ug/l                | 111             |                  | 80-120                 |            |                |
| 1,2-Dichloroethane          | N.D.                                               | 0.1                | 0.5              | ug/l                | 112             |                  | 80-127                 |            |                |
| 1,1-Dichloroethene          | N.D.                                               | 0.1                | 0.5              | ug/l                | 111             |                  | 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                | 110             |                  | 80-120                 |            |                |
| Dichlorofluoromethane       | N.D.                                               | 0.2                | 0.5              | ug/l                | 126             |                  | 63-149                 |            |                |
| 1,2-Dichloropropane         | N.D.                                               | 0.1                | 0.5              | ug/l                | 106             |                  | 80-120                 |            |                |
| 1,3-Dichloropropane         | N.D.                                               | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| 2,2-Dichloropropane         | N.D.                                               | 0.1                | 0.5              | ug/l                | 115             |                  | 75-122                 |            |                |
| 1,1-Dichloropropene         | N.D.                                               | 0.1                | 0.5              | ug/l                | 105             |                  | 80-121                 |            |                |
| cis-1,3-Dichloropropene     | N.D.                                               | 0.1                | 0.5              | ug/l                | 107             |                  | 74-120                 |            |                |
| trans-1,3-Dichloropropene   | N.D.                                               | 0.1                | 0.5              | ug/l                | 98              |                  | 73-126                 |            |                |
| Ethyl ether                 | N.D.                                               | 0.1                | 0.5              | ug/l                | 95              |                  | 59-130                 |            |                |
| Ethylbenzene                | N.D.                                               | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |
| Freon 113                   | N.D.                                               | 0.2                | 0.5              | ug/l                | 112             |                  | 78-132                 |            |                |
| Hexachlorobutadiene         | N.D.                                               | 0.1                | 0.5              | ug/l                | 109             |                  | 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: 1383730

Reported: 04/19/13 at 01:51 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                | 104             |                  | 80-120                 |            |                |
| p-Isopropyltoluene          | N.D.                | 0.1                | 0.5              | ug/l                | 102             |                  | 80-120                 |            |                |
| Methyl Tertiary Butyl Ether | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 80-125                 |            |                |
| 4-Methyl-2-Pentanone        | N.D.                | 1.0                | 5.0              | ug/l                | 98              |                  | 69-135                 |            |                |
| Methylene Chloride          | N.D.                | 0.2                | 0.5              | ug/l                | 113             |                  | 80-120                 |            |                |
| n-Propylbenzene             | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 80-120                 |            |                |
| Styrene                     | N.D.                | 0.1                | 0.5              | ug/l                | 106             |                  | 80-120                 |            |                |
| 1,1,1,2-Tetrachloroethane   | N.D.                | 0.1                | 0.5              | ug/l                | 106             |                  | 80-120                 |            |                |
| 1,1,2,2-Tetrachloroethane   | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 80-125                 |            |                |
| Tetrachloroethene           | N.D.                | 0.1                | 0.5              | ug/l                | 109             |                  | 80-120                 |            |                |
| Tetrahydrofuran             | N.D.                | 2.0                | 5.0              | ug/l                | 127             |                  | 65-131                 |            |                |
| Toluene                     | N.D.                | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |
| 1,2,3-Trichlorobenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 109             |                  | 63-120                 |            |                |
| 1,2,4-Trichlorobenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 105             |                  | 70-120                 |            |                |
| 1,1,1-Trichloroethane       | N.D.                | 0.1                | 0.5              | ug/l                | 111             |                  | 79-127                 |            |                |
| 1,1,2-Trichloroethane       | N.D.                | 0.1                | 0.5              | ug/l                | 109             |                  | 80-120                 |            |                |
| Trichloroethene             | N.D.                | 0.1                | 0.5              | ug/l                | 105             |                  | 80-120                 |            |                |
| Trichlorofluoromethane      | N.D.                | 0.1                | 0.5              | ug/l                | 111             |                  | 77-132                 |            |                |
| 1,2,3-Trichloropropane      | N.D.                | 0.3                | 1.0              | ug/l                | 102             |                  | 80-120                 |            |                |
| 1,2,4-Trimethylbenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 80-120                 |            |                |
| 1,3,5-Trimethylbenzene      | N.D.                | 0.1                | 0.5              | ug/l                | 101             |                  | 80-120                 |            |                |
| Vinyl Chloride              | N.D.                | 0.1                | 0.5              | ug/l                | 105             |                  | 65-127                 |            |                |
| Xylene (Total)              | N.D.                | 0.1                | 0.5              | ug/l                | 103             |                  | 80-120                 |            |                |

Batch number: I131081AA

Sample number(s): 7026228-7026230

|                             |      |     |     |      |     |  |        |  |  |
|-----------------------------|------|-----|-----|------|-----|--|--------|--|--|
| Acetone                     | N.D. | 3.0 | 5.0 | ug/l | 97  |  | 73-135 |  |  |
| Allyl Chloride              | N.D. | 0.1 | 0.5 | ug/l | 89  |  | 61-130 |  |  |
| Benzene                     | N.D. | 0.1 | 0.5 | ug/l | 89  |  | 80-120 |  |  |
| Bromobenzene                | N.D. | 0.1 | 0.5 | ug/l | 86  |  | 80-120 |  |  |
| Bromochloromethane          | N.D. | 0.1 | 0.5 | ug/l | 86  |  | 80-125 |  |  |
| Bromodichloromethane        | N.D. | 0.1 | 0.5 | ug/l | 93  |  | 80-120 |  |  |
| Bromoform                   | N.D. | 0.1 | 0.5 | ug/l | 100 |  | 63-132 |  |  |
| Bromomethane                | N.D. | 0.1 | 0.5 | ug/l | 83  |  | 38-146 |  |  |
| 2-Butanone                  | N.D. | 1.0 | 5.0 | ug/l | 86  |  | 70-130 |  |  |
| n-Butylbenzene              | N.D. | 0.1 | 0.5 | ug/l | 91  |  | 80-120 |  |  |
| sec-Butylbenzene            | N.D. | 0.1 | 0.5 | ug/l | 89  |  | 80-120 |  |  |
| tert-Butylbenzene           | N.D. | 0.1 | 0.5 | ug/l | 85  |  | 80-120 |  |  |
| Carbon Tetrachloride        | N.D. | 0.1 | 0.5 | ug/l | 90  |  | 74-133 |  |  |
| Chlorobenzene               | N.D. | 0.1 | 0.5 | ug/l | 88  |  | 80-120 |  |  |
| Chloroethane                | N.D. | 0.1 | 0.5 | ug/l | 87  |  | 67-124 |  |  |
| Chloroform                  | N.D. | 0.1 | 0.5 | ug/l | 91  |  | 80-120 |  |  |
| Chloromethane               | N.D. | 0.2 | 0.5 | ug/l | 87  |  | 55-135 |  |  |
| 2-Chlorotoluene             | N.D. | 0.1 | 0.5 | ug/l | 88  |  | 80-120 |  |  |
| 4-Chlorotoluene             | N.D. | 0.1 | 0.5 | ug/l | 87  |  | 80-120 |  |  |
| 1,2-Dibromo-3-chloropropane | N.D. | 0.2 | 0.5 | ug/l | 88  |  | 57-141 |  |  |
| Dibromochloromethane        | N.D. | 0.1 | 0.5 | ug/l | 99  |  | 80-126 |  |  |
| 1,2-Dibromoethane           | N.D. | 0.1 | 0.5 | ug/l | 90  |  | 80-120 |  |  |
| Dibromomethane              | N.D. | 0.1 | 0.5 | ug/l | 90  |  | 80-120 |  |  |
| 1,2-Dichlorobenzene         | N.D. | 0.1 | 0.5 | ug/l | 91  |  | 80-120 |  |  |
| 1,3-Dichlorobenzene         | N.D. | 0.1 | 0.5 | ug/l | 90  |  | 80-120 |  |  |
| 1,4-Dichlorobenzene         | N.D. | 0.1 | 0.5 | ug/l | 89  |  | 80-112 |  |  |
| Dichlorodifluoromethane     | N.D. | 0.1 | 0.5 | ug/l | 84  |  | 39-120 |  |  |
| 1,1-Dichloroethane          | N.D. | 0.1 | 0.5 | ug/l | 90  |  | 80-120 |  |  |
| 1,2-Dichloroethane          | N.D. | 0.1 | 0.5 | ug/l | 95  |  | 80-127 |  |  |
| 1,1-Dichloroethene          | N.D. | 0.1 | 0.5 | ug/l | 87  |  | 80-123 |  |  |
| cis-1,2-Dichloroethene      | N.D. | 0.1 | 0.5 | ug/l | 88  |  | 80-120 |  |  |

\*- 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: 1383730

Reported: 04/19/13 at 01:51 PM

| Analysis Name               | Blank Result | Blank MDL** | Blank LOQ | Report Units | LCS %REC | LCS D %REC | LCS/LCSD Limits | RPD | RPD Max |
|-----------------------------|--------------|-------------|-----------|--------------|----------|------------|-----------------|-----|---------|
| trans-1,2-Dichloroethene    | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 80-120          |     |         |
| Dichlorofluoromethane       | N.D.         | 0.2         | 0.5       | ug/l         | 102      |            | 63-149          |     |         |
| 1,2-Dichloropropane         | N.D.         | 0.1         | 0.5       | ug/l         | 92       |            | 80-120          |     |         |
| 1,3-Dichloropropane         | N.D.         | 0.1         | 0.5       | ug/l         | 93       |            | 80-120          |     |         |
| 2,2-Dichloropropane         | N.D.         | 0.1         | 0.5       | ug/l         | 84       |            | 75-122          |     |         |
| 1,1-Dichloropropene         | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 80-121          |     |         |
| cis-1,3-Dichloropropene     | N.D.         | 0.1         | 0.5       | ug/l         | 90       |            | 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         | 73       |            | 59-130          |     |         |
| Ethylbenzene                | N.D.         | 0.1         | 0.5       | ug/l         | 89       |            | 80-120          |     |         |
| Freon 113                   | N.D.         | 0.2         | 0.5       | ug/l         | 86       |            | 78-132          |     |         |
| Hexachlorobutadiene         | N.D.         | 0.1         | 0.5       | ug/l         | 81       |            | 61-125          |     |         |
| Isopropylbenzene            | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 80-120          |     |         |
| p-Isopropyltoluene          | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 80-120          |     |         |
| Methyl Tertiary Butyl Ether | N.D.         | 0.1         | 0.5       | ug/l         | 87       |            | 80-125          |     |         |
| 4-Methyl-2-Pentanone        | N.D.         | 1.0         | 5.0       | ug/l         | 91       |            | 69-135          |     |         |
| Methylene Chloride          | N.D.         | 0.2         | 0.5       | ug/l         | 91       |            | 80-120          |     |         |
| n-Propylbenzene             | N.D.         | 0.1         | 0.5       | ug/l         | 91       |            | 80-120          |     |         |
| Styrene                     | N.D.         | 0.1         | 0.5       | ug/l         | 87       |            | 80-120          |     |         |
| 1,1,1,2-Tetrachloroethane   | N.D.         | 0.1         | 0.5       | ug/l         | 90       |            | 80-120          |     |         |
| 1,1,2,2-Tetrachloroethane   | N.D.         | 0.1         | 0.5       | ug/l         | 97       |            | 80-125          |     |         |
| Tetrachloroethene           | N.D.         | 0.1         | 0.5       | ug/l         | 83       |            | 80-120          |     |         |
| Tetrahydrofuran             | N.D.         | 2.0         | 5.0       | ug/l         | 87       |            | 65-131          |     |         |
| Toluene                     | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 80-120          |     |         |
| 1,2,3-Trichlorobenzene      | N.D.         | 0.1         | 0.5       | ug/l         | 86       |            | 63-120          |     |         |
| 1,2,4-Trichlorobenzene      | N.D.         | 0.1         | 0.5       | ug/l         | 84       |            | 70-120          |     |         |
| 1,1,1-Trichloroethane       | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 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         | 87       |            | 80-120          |     |         |
| Trichlorofluoromethane      | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 77-132          |     |         |
| 1,2,3-Trichloropropane      | N.D.         | 0.3         | 1.0       | ug/l         | 98       |            | 80-120          |     |         |
| 1,2,4-Trimethylbenzene      | N.D.         | 0.1         | 0.5       | ug/l         | 90       |            | 80-120          |     |         |
| 1,3,5-Trimethylbenzene      | N.D.         | 0.1         | 0.5       | ug/l         | 90       |            | 80-120          |     |         |
| Vinyl Chloride              | N.D.         | 0.1         | 0.5       | ug/l         | 88       |            | 65-127          |     |         |
| Xylene (Total)              | N.D.         | 0.1         | 0.5       | ug/l         | 87       |            | 80-120          |     |         |

Batch number: 13108WAC026

Sample number(s): 7026228-7026243, 7026245

|                        |      |       |       |      |      |      |        |   |    |
|------------------------|------|-------|-------|------|------|------|--------|---|----|
| Acenaphthene           | N.D. | 0.010 | 0.050 | ug/l | 121  | 123  | 65-124 | 1 | 30 |
| Acenaphthylene         | N.D. | 0.010 | 0.050 | ug/l | 114* | 116* | 72-113 | 2 | 30 |
| Anthracene             | N.D. | 0.010 | 0.050 | ug/l | 119* | 120* | 70-117 | 1 | 30 |
| Benzo(a)anthracene     | N.D. | 0.010 | 0.050 | ug/l | 108  | 111  | 75-115 | 2 | 30 |
| Benzo(a)pyrene         | N.D. | 0.010 | 0.050 | ug/l | 126* | 129* | 72-120 | 3 | 30 |
| Benzo(b)fluoranthene   | N.D. | 0.010 | 0.050 | ug/l | 138* | 142* | 74-130 | 3 | 30 |
| Benzo(g,h,i)perylene   | N.D. | 0.010 | 0.050 | ug/l | 125* | 133* | 63-121 | 7 | 30 |
| Benzo(k)fluoranthene   | N.D. | 0.010 | 0.050 | ug/l | 132* | 137* | 74-118 | 3 | 30 |
| Chrysene               | N.D. | 0.010 | 0.050 | ug/l | 114* | 117* | 75-112 | 3 | 30 |
| Dibenz(a,h)anthracene  | N.D. | 0.010 | 0.050 | ug/l | 121  | 129* | 66-122 | 6 | 30 |
| Fluoranthene           | N.D. | 0.010 | 0.050 | ug/l | 125* | 125* | 73-116 | 1 | 30 |
| Fluorene               | N.D. | 0.010 | 0.050 | ug/l | 117* | 120* | 74-115 | 2 | 30 |
| Indeno(1,2,3-cd)pyrene | N.D. | 0.010 | 0.050 | ug/l | 119  | 129* | 66-122 | 8 | 30 |
| 1-Methylnaphthalene    | N.D. | 0.010 | 0.050 | ug/l | 117* | 119* | 72-114 | 2 | 30 |
| 2-Methylnaphthalene    | N.D. | 0.010 | 0.050 | ug/l | 113  | 116  | 74-119 | 2 | 30 |
| Naphthalene            | N.D. | 0.030 | 0.050 | ug/l | 105  | 106  | 67-118 | 2 | 30 |
| Phenanthrene           | N.D. | 0.030 | 0.050 | ug/l | 121* | 123* | 72-109 | 1 | 30 |
| Pyrene                 | N.D. | 0.010 | 0.050 | ug/l | 109  | 110  | 71-116 | 1 | 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

Group Number: 1383730

Reported: 04/19/13 at 01:51 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: 131081848002 | Sample number(s): 7026228-7026245          |                    |                  |                     |                 |                  |                        |            |                |
| Arsenic                    | N.D.                                       | 0.0068             | 0.0200           | mg/l                | 98              |                  | 90-113                 |            |                |
| Barium                     | 0.00069 J                                  | 0.00033            | 0.0050           | mg/l                | 99              |                  | 90-110                 |            |                |
| Cadmium                    | N.D.                                       | 0.00036            | 0.0050           | mg/l                | 100             |                  | 90-112                 |            |                |
| Calcium                    | N.D.                                       | 0.0640             | 0.200            | mg/l                | 100             |                  | 90-110                 |            |                |
| Chromium                   | N.D.                                       | 0.0011             | 0.0150           | mg/l                | 101             |                  | 90-110                 |            |                |
| Lead                       | N.D.                                       | 0.0051             | 0.0150           | mg/l                | 102             |                  | 88-110                 |            |                |
| Magnesium                  | N.D.                                       | 0.0606             | 0.100            | mg/l                | 99              |                  | 90-110                 |            |                |
| Nickel                     | N.D.                                       | 0.0011             | 0.0100           | mg/l                | 102             |                  | 90-111                 |            |                |
| Selenium                   | N.D.                                       | 0.0075             | 0.0200           | mg/l                | 94              |                  | 80-120                 |            |                |
| Silver                     | N.D.                                       | 0.0012             | 0.0050           | mg/l                | 95              |                  | 80-120                 |            |                |
| Vanadium                   | N.D.                                       | 0.0013             | 0.0050           | mg/l                | 101             |                  | 90-110                 |            |                |
| Batch number: 131085713002 | Sample number(s): 7026228-7026245          |                    |                  |                     |                 |                  |                        |            |                |
| Mercury                    | N.D.                                       | 0.00007            | 0.00020          | mg/l                | 103             |                  | 80-120                 |            |                |
|                            |                                            | 0                  |                  |                     |                 |                  |                        |            |                |
| Batch number: 13108807902A | Sample number(s): 7026237-7026238, 7026243 |                    |                  |                     |                 |                  |                        |            |                |
| HEM (oil & grease)         | N.D.                                       | 1.4                | 5.0              | mg/l                | 90              | 86               | 78-114                 | 5          | 16             |

## 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: C131081AA     | Sample number(s): 7026231-7026243, 7026245-7026246 UNSPK: 7026232 |                 |                      |            |                |                 |                 |                |                    |
| Acetone                     | 105                                                               | 114             | 57-163               | 7          | 30             |                 |                 |                |                    |
| Allyl Chloride              | 104                                                               | 108             | 67-139               | 4          | 30             |                 |                 |                |                    |
| Benzene                     | 100                                                               | 107             | 87-126               | 6          | 30             |                 |                 |                |                    |
| Bromobenzene                | 98                                                                | 107             | 80-123               | 8          | 30             |                 |                 |                |                    |
| Bromochloromethane          | 108                                                               | 111             | 82-125               | 3          | 30             |                 |                 |                |                    |
| Bromodichloromethane        | 100                                                               | 106             | 82-133               | 5          | 30             |                 |                 |                |                    |
| Bromoform                   | 97                                                                | 101             | 60-138               | 3          | 30             |                 |                 |                |                    |
| Bromomethane                | 106                                                               | 107             | 41-145               | 1          | 30             |                 |                 |                |                    |
| 2-Butanone                  | 111                                                               | 123             | 63-146               | 10         | 30             |                 |                 |                |                    |
| n-Butylbenzene              | 98                                                                | 105             | 83-131               | 7          | 30             |                 |                 |                |                    |
| sec-Butylbenzene            | 98                                                                | 106             | 84-128               | 7          | 30             |                 |                 |                |                    |
| tert-Butylbenzene           | 94                                                                | 102             | 84-135               | 8          | 30             |                 |                 |                |                    |
| Carbon Tetrachloride        | 109                                                               | 115             | 81-148               | 6          | 30             |                 |                 |                |                    |
| Chlorobenzene               | 103                                                               | 110             | 78-133               | 7          | 30             |                 |                 |                |                    |
| Chloroethane                | 105                                                               | 105             | 70-139               | 0          | 30             |                 |                 |                |                    |
| Chloroform                  | 106                                                               | 113             | 86-136               | 5          | 30             |                 |                 |                |                    |
| Chloromethane               | 98                                                                | 98              | 55-152               | 0          | 30             |                 |                 |                |                    |
| 2-Chlorotoluene             | 97                                                                | 105             | 81-120               | 8          | 30             |                 |                 |                |                    |
| 4-Chlorotoluene             | 97                                                                | 106             | 82-119               | 9          | 30             |                 |                 |                |                    |
| 1,2-Dibromo-3-chloropropane | 110                                                               | 120             | 43-143               | 8          | 30             |                 |                 |                |                    |
| Dibromochloromethane        | 100                                                               | 105             | 79-125               | 5          | 30             |                 |                 |                |                    |
| 1,2-Dibromoethane           | 101                                                               | 108             | 84-127               | 6          | 30             |                 |                 |                |                    |
| Dibromomethane              | 103                                                               | 108             | 83-126               | 5          | 30             |                 |                 |                |                    |
| 1,2-Dichlorobenzene         | 101                                                               | 109             | 83-117               | 8          | 30             |                 |                 |                |                    |
| 1,3-Dichlorobenzene         | 101                                                               | 110             | 81-118               | 8          | 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: 04/19/13 at 01:51 PM

Group Number: 1383730

**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> | <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 RPD</u><br><u>Max</u> |
|-----------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|------------------------------|
| 1,4-Dichlorobenzene         | 100                      | 108                       | 79-120                         | 8          | 30                       |                           |                           |                          |                              |
| Dichlorodifluoromethane     | 108                      | 102                       | 28-136                         | 6          | 30                       |                           |                           |                          |                              |
| 1,1-Dichloroethane          | 105                      | 112                       | 88-136                         | 7          | 30                       |                           |                           |                          |                              |
| 1,2-Dichloroethane          | 104                      | 112                       | 82-135                         | 7          | 30                       |                           |                           |                          |                              |
| 1,1-Dichloroethene          | 110                      | 115                       | 83-150                         | 5          | 30                       |                           |                           |                          |                              |
| cis-1,2-Dichloroethene      | 102                      | 110                       | 82-129                         | 7          | 30                       |                           |                           |                          |                              |
| trans-1,2-Dichloroethene    | 106                      | 112                       | 88-127                         | 6          | 30                       |                           |                           |                          |                              |
| Dichlorofluoromethane       | 129                      | 130                       | 59-176                         | 1          | 30                       |                           |                           |                          |                              |
| 1,2-Dichloropropane         | 101                      | 107                       | 91-126                         | 6          | 30                       |                           |                           |                          |                              |
| 1,3-Dichloropropane         | 100                      | 106                       | 80-127                         | 6          | 30                       |                           |                           |                          |                              |
| 2,2-Dichloropropane         | 111                      | 117                       | 80-134                         | 6          | 30                       |                           |                           |                          |                              |
| 1,1-Dichloropropene         | 103                      | 109                       | 86-139                         | 6          | 30                       |                           |                           |                          |                              |
| cis-1,3-Dichloropropene     | 100                      | 107                       | 74-132                         | 7          | 30                       |                           |                           |                          |                              |
| trans-1,3-Dichloropropene   | 91                       | 97                        | 71-128                         | 6          | 30                       |                           |                           |                          |                              |
| Ethyl ether                 | 82                       | 83                        | 67-127                         | 1          | 30                       |                           |                           |                          |                              |
| Ethylbenzene                | 101                      | 107                       | 80-140                         | 6          | 30                       |                           |                           |                          |                              |
| Freon 113                   | 113                      | 114                       | 87-158                         | 1          | 30                       |                           |                           |                          |                              |
| Hexachlorobutadiene         | 104                      | 109                       | 65-128                         | 5          | 30                       |                           |                           |                          |                              |
| Isopropylbenzene            | 102                      | 109                       | 81-133                         | 7          | 30                       |                           |                           |                          |                              |
| p-Isopropyltoluene          | 100                      | 107                       | 84-124                         | 7          | 30                       |                           |                           |                          |                              |
| Methyl Tertiary Butyl Ether | 94                       | 99                        | 82-132                         | 6          | 30                       |                           |                           |                          |                              |
| 4-Methyl-2-Pentanone        | 103                      | 104                       | 69-149                         | 1          | 30                       |                           |                           |                          |                              |
| Methylene Chloride          | 106                      | 113                       | 84-122                         | 6          | 30                       |                           |                           |                          |                              |
| n-Propylbenzene             | 98                       | 107                       | 79-131                         | 9          | 30                       |                           |                           |                          |                              |
| Styrene                     | 104                      | 111                       | 63-151                         | 7          | 30                       |                           |                           |                          |                              |
| 1,1,1,2-Tetrachloroethane   | 103                      | 109                       | 87-126                         | 6          | 30                       |                           |                           |                          |                              |
| 1,1,2,2-Tetrachloroethane   | 99                       | 107                       | 75-131                         | 8          | 30                       |                           |                           |                          |                              |
| Tetrachloroethene           | 108                      | 113                       | 75-129                         | 5          | 30                       |                           |                           |                          |                              |
| Tetrahydrofuran             | 102                      | 113                       | 56-154                         | 11         | 30                       |                           |                           |                          |                              |
| Toluene                     | 98                       | 106                       | 83-127                         | 6          | 30                       |                           |                           |                          |                              |
| 1,2,3-Trichlorobenzene      | 106                      | 112                       | 73-125                         | 6          | 30                       |                           |                           |                          |                              |
| 1,2,4-Trichlorobenzene      | 103                      | 110                       | 77-120                         | 6          | 30                       |                           |                           |                          |                              |
| 1,1,1-Trichloroethane       | 109                      | 115                       | 85-140                         | 6          | 30                       |                           |                           |                          |                              |
| 1,1,2-Trichloroethane       | 108                      | 116                       | 85-129                         | 7          | 30                       |                           |                           |                          |                              |
| Trichloroethene             | 103                      | 110                       | 85-131                         | 7          | 30                       |                           |                           |                          |                              |
| Trichlorofluoromethane      | 116                      | 113                       | 67-161                         | 3          | 30                       |                           |                           |                          |                              |
| 1,2,3-Trichloropropane      | 102                      | 106                       | 76-120                         | 4          | 30                       |                           |                           |                          |                              |
| 1,2,4-Trimethylbenzene      | 98                       | 105                       | 87-126                         | 7          | 30                       |                           |                           |                          |                              |
| 1,3,5-Trimethylbenzene      | 97                       | 106                       | 89-129                         | 8          | 30                       |                           |                           |                          |                              |
| Vinyl Chloride              | 106                      | 107                       | 65-151                         | 1          | 30                       |                           |                           |                          |                              |
| Xylene (Total)              | 101                      | 108                       | 81-137                         | 7          | 30                       |                           |                           |                          |                              |

Batch number: I131081AA

Sample number(s): 7026228-7026230 UNSPK: 7026229

|                      |     |     |        |    |    |
|----------------------|-----|-----|--------|----|----|
| Acetone              | 122 | 102 | 57-163 | 18 | 30 |
| Allyl Chloride       | 97  | 94  | 67-139 | 3  | 30 |
| Benzene              | 96  | 91  | 87-126 | 6  | 30 |
| Bromobenzene         | 91  | 87  | 80-123 | 5  | 30 |
| Bromochloromethane   | 94  | 89  | 82-125 | 5  | 30 |
| Bromodichloromethane | 102 | 94  | 82-133 | 8  | 30 |
| Bromoform            | 103 | 96  | 60-138 | 8  | 30 |
| Bromomethane         | 96  | 92  | 41-145 | 5  | 30 |
| 2-Butanone           | 102 | 88  | 63-146 | 15 | 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

Group Number: 1383730

Reported: 04/19/13 at 01:51 PM

### Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name               | MS<br>%REC | MSD<br>%REC | MS/MSD<br>Limits | RPD | RPD<br>MAX | BKG<br>Conc | DUP<br>Conc | DUP<br>RPD | Dup RPD<br>Max |
|-----------------------------|------------|-------------|------------------|-----|------------|-------------|-------------|------------|----------------|
| n-Butylbenzene              | 100        | 95          | 83-131           | 5   | 30         |             |             |            |                |
| sec-Butylbenzene            | 97         | 93          | 84-128           | 4   | 30         |             |             |            |                |
| tert-Butylbenzene           | 91         | 89          | 84-135           | 3   | 30         |             |             |            |                |
| Carbon Tetrachloride        | 103        | 95          | 81-148           | 8   | 30         |             |             |            |                |
| Chlorobenzene               | 97         | 92          | 78-133           | 6   | 30         |             |             |            |                |
| Chloroethane                | 101        | 98          | 70-139           | 3   | 30         |             |             |            |                |
| Chloroform                  | 100        | 93          | 86-136           | 7   | 30         |             |             |            |                |
| Chloromethane               | 99         | 97          | 55-152           | 2   | 30         |             |             |            |                |
| 2-Chlorotoluene             | 93         | 89          | 81-120           | 4   | 30         |             |             |            |                |
| 4-Chlorotoluene             | 93         | 89          | 82-119           | 4   | 30         |             |             |            |                |
| 1,2-Dibromo-3-chloropropane | 101        | 87          | 43-143           | 15  | 30         |             |             |            |                |
| Dibromochloromethane        | 105        | 97          | 79-125           | 8   | 30         |             |             |            |                |
| 1,2-Dibromoethane           | 96         | 88          | 84-127           | 8   | 30         |             |             |            |                |
| Dibromomethane              | 97         | 90          | 83-126           | 8   | 30         |             |             |            |                |
| 1,2-Dichlorobenzene         | 97         | 92          | 83-117           | 5   | 30         |             |             |            |                |
| 1,3-Dichlorobenzene         | 96         | 91          | 81-118           | 5   | 30         |             |             |            |                |
| 1,4-Dichlorobenzene         | 96         | 91          | 79-120           | 5   | 30         |             |             |            |                |
| Dichlorodifluoromethane     | 102        | 95          | 28-136           | 7   | 30         |             |             |            |                |
| 1,1-Dichloroethane          | 97         | 91          | 88-136           | 6   | 30         |             |             |            |                |
| 1,2-Dichloroethane          | 104        | 94          | 82-135           | 10  | 30         |             |             |            |                |
| 1,1-Dichloroethene          | 96         | 92          | 83-150           | 5   | 30         |             |             |            |                |
| cis-1,2-Dichloroethene      | 93         | 88          | 82-129           | 5   | 30         |             |             |            |                |
| trans-1,2-Dichloroethene    | 95         | 91          | 88-127           | 4   | 30         |             |             |            |                |
| Dichlorofluoromethane       | 122        | 113         | 59-176           | 7   | 30         |             |             |            |                |
| 1,2-Dichloropropane         | 100        | 93          | 91-126           | 7   | 30         |             |             |            |                |
| 1,3-Dichloropropane         | 99         | 92          | 80-127           | 7   | 30         |             |             |            |                |
| 2,2-Dichloropropane         | 93         | 88          | 80-134           | 6   | 30         |             |             |            |                |
| 1,1-Dichloropropene         | 97         | 92          | 86-139           | 5   | 30         |             |             |            |                |
| cis-1,3-Dichloropropene     | 95         | 88          | 74-132           | 8   | 30         |             |             |            |                |
| trans-1,3-Dichloropropene   | 94         | 87          | 71-128           | 7   | 30         |             |             |            |                |
| Ethyl ether                 | 79         | 75          | 67-127           | 5   | 30         |             |             |            |                |
| Ethylbenzene                | 98         | 93          | 80-140           | 6   | 30         |             |             |            |                |
| Freon 113                   | 99         | 90          | 87-158           | 9   | 30         |             |             |            |                |
| Hexachlorobutadiene         | 91         | 85          | 65-128           | 7   | 30         |             |             |            |                |
| Isopropylbenzene            | 98         | 92          | 81-133           | 6   | 30         |             |             |            |                |
| p-Isopropyltoluene          | 96         | 92          | 84-124           | 4   | 30         |             |             |            |                |
| Methyl Tertiary Butyl Ether | 89         | 84          | 82-132           | 6   | 30         |             |             |            |                |
| 4-Methyl-2-Pentanone        | 103        | 94          | 69-149           | 9   | 30         |             |             |            |                |
| Methylene Chloride          | 95         | 90          | 84-122           | 5   | 30         |             |             |            |                |
| n-Propylbenzene             | 98         | 94          | 79-131           | 4   | 30         |             |             |            |                |
| Styrene                     | 95         | 89          | 63-151           | 6   | 30         |             |             |            |                |
| 1,1,1,2-Tetrachloroethane   | 100        | 93          | 87-126           | 8   | 30         |             |             |            |                |
| 1,1,2,2-Tetrachloroethane   | 105        | 98          | 75-131           | 7   | 30         |             |             |            |                |
| Tetrachloroethene           | 92         | 87          | 75-129           | 6   | 30         |             |             |            |                |
| Tetrahydrofuran             | 98         | 84          | 56-154           | 16  | 30         |             |             |            |                |
| Toluene                     | 96         | 90          | 83-127           | 6   | 30         |             |             |            |                |
| 1,2,3-Trichlorobenzene      | 91         | 86          | 73-125           | 6   | 30         |             |             |            |                |
| 1,2,4-Trichlorobenzene      | 89         | 84          | 77-120           | 6   | 30         |             |             |            |                |
| 1,1,1-Trichloroethane       | 99         | 94          | 85-140           | 6   | 30         |             |             |            |                |
| 1,1,2-Trichloroethane       | 99         | 93          | 85-129           | 6   | 30         |             |             |            |                |
| Trichloroethene             | 97         | 91          | 85-131           | 6   | 30         |             |             |            |                |
| Trichlorofluoromethane      | 110        | 100         | 67-161           | 10  | 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: 04/19/13 at 01:51 PM

Group Number: 1383730

**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> | <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> |
|------------------------|--------------------------|---------------------------|--------------------------------|------------|--------------------------|---------------------------|---------------------------|--------------------------|-------------------------------------|
| 1,2,3-Trichloropropane | 102                      | 96                        | 76-120                         | 6          | 30                       |                           |                           |                          |                                     |
| 1,2,4-Trimethylbenzene | 96                       | 92                        | 87-126                         | 4          | 30                       |                           |                           |                          |                                     |
| 1,3,5-Trimethylbenzene | 96                       | 92                        | 89-129                         | 4          | 30                       |                           |                           |                          |                                     |
| Vinyl Chloride         | 104                      | 101                       | 65-151                         | 3          | 30                       |                           |                           |                          |                                     |
| Xylene (Total)         | 96                       | 91                        | 81-137                         | 6          | 30                       |                           |                           |                          |                                     |

|                            |                                                               |     |        |   |    |          |          |         |    |
|----------------------------|---------------------------------------------------------------|-----|--------|---|----|----------|----------|---------|----|
| Batch number: 131081848002 | Sample number(s): 7026228-7026245 UNSPK: 7026234 BKG: 7026234 |     |        |   |    |          |          |         |    |
| Arsenic                    | 100                                                           | 96  | 81-123 | 4 | 20 | N.D.     | N.D.     | 0 (1)   | 20 |
| Barium                     | 101                                                           | 99  | 78-118 | 1 | 20 | 0.0339   | 0.0354   | 4       | 20 |
| Cadmium                    | 99                                                            | 97  | 83-116 | 2 | 20 | N.D.     | N.D.     | 0 (1)   | 20 |
| Calcium                    | 95                                                            | 96  | 81-118 | 1 | 20 | 3.46     | 3.38     | 2       | 20 |
| Chromium                   | 103                                                           | 101 | 81-120 | 1 | 20 | 0.0025 J | 0.0026 J | 4 (1)   | 20 |
| Lead                       | 103                                                           | 101 | 75-125 | 2 | 20 | N.D.     | N.D.     | 0 (1)   | 20 |
| Magnesium                  | 100                                                           | 101 | 75-125 | 0 | 20 | 1.72     | 1.74     | 1       | 20 |
| Nickel                     | 102                                                           | 100 | 86-115 | 1 | 20 | 0.0032 J | 0.0021 J | 42* (1) | 20 |
| Selenium                   | 97                                                            | 94  | 75-125 | 4 | 20 | N.D.     | N.D.     | 0 (1)   | 20 |
| Silver                     | 96                                                            | 95  | 75-125 | 1 | 20 | N.D.     | N.D.     | 0 (1)   | 20 |
| Vanadium                   | 102                                                           | 101 | 90-111 | 2 | 20 | 0.0030 J | 0.0043 J | 36* (1) | 20 |

|                            |                                                               |    |        |   |    |      |      |       |    |
|----------------------------|---------------------------------------------------------------|----|--------|---|----|------|------|-------|----|
| Batch number: 131085713002 | Sample number(s): 7026228-7026245 UNSPK: 7026238 BKG: 7026238 |    |        |   |    |      |      |       |    |
| Mercury                    | 93                                                            | 99 | 80-120 | 6 | 20 | N.D. | N.D. | 0 (1) | 20 |

|                            |                                                          |  |        |  |  |  |  |  |  |
|----------------------------|----------------------------------------------------------|--|--------|--|--|--|--|--|--|
| Batch number: 13108807902A | Sample number(s): 7026237-7026238,7026243 UNSPK: P026210 |  |        |  |  |  |  |  |  |
| HEM (oil & grease)         | 89                                                       |  | 78-114 |  |  |  |  |  |  |

**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: NHDES VOCs 25ml purge  
Batch number: C131081AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 7026231 | 105                  | 105                   | 97         | 97                   |
| 7026232 | 103                  | 106                   | 97         | 98                   |
| 7026233 | 104                  | 106                   | 97         | 97                   |
| 7026234 | 105                  | 105                   | 97         | 97                   |
| 7026235 | 104                  | 107                   | 96         | 96                   |
| 7026236 | 103                  | 105                   | 97         | 98                   |
| 7026237 | 104                  | 106                   | 97         | 97                   |
| 7026238 | 105                  | 105                   | 97         | 98                   |
| 7026239 | 104                  | 107                   | 97         | 98                   |
| 7026240 | 103                  | 106                   | 97         | 99                   |
| 7026241 | 104                  | 107                   | 97         | 97                   |
| 7026242 | 104                  | 106                   | 97         | 98                   |
| 7026243 | 104                  | 106                   | 97         | 99                   |
| 7026245 | 104                  | 106                   | 97         | 97                   |
| 7026246 | 102                  | 105                   | 98         | 97                   |

\*- 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: 1383730

Reported: 04/19/13 at 01:51 PM

### Surrogate Quality Control

|       |     |     |    |     |
|-------|-----|-----|----|-----|
| Blank | 102 | 105 | 97 | 97  |
| LCS   | 103 | 102 | 99 | 100 |
| MS    | 103 | 107 | 99 | 99  |
| MSD   | 102 | 104 | 98 | 99  |

|         |        |        |        |        |
|---------|--------|--------|--------|--------|
| Limits: | 77-114 | 74-113 | 77-110 | 78-110 |
|---------|--------|--------|--------|--------|

Analysis Name: NHDES VOCs 25ml purge

Batch number: I131081AA

|         | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---------|----------------------|-----------------------|------------|----------------------|
| 7026228 | 99                   | 106                   | 100        | 100                  |
| 7026229 | 99                   | 104                   | 99         | 100                  |
| 7026230 | 102                  | 106                   | 99         | 99                   |
| Blank   | 98                   | 104                   | 100        | 99                   |
| LCS     | 98                   | 101                   | 101        | 101                  |
| MS      | 100                  | 104                   | 101        | 104                  |
| MSD     | 98                   | 103                   | 100        | 102                  |

|         |        |        |        |        |
|---------|--------|--------|--------|--------|
| Limits: | 77-114 | 74-113 | 77-110 | 78-110 |
|---------|--------|--------|--------|--------|

Analysis Name: PAHs in waters by SIM

Batch number: 13108WAC026

|         | Fluoranthene-d10 | Benzo(a)pyrene-d12 | 1-Methylnaphthalene-d10 |
|---------|------------------|--------------------|-------------------------|
| 7026228 | 116              | 95                 | 110                     |
| 7026229 | 117              | 100                | 111                     |
| 7026230 | 116              | 71                 | 112                     |
| 7026231 | 119              | 102                | 114                     |
| 7026232 | 95               | 80                 | 100                     |
| 7026233 | 76               | 33*                | 89                      |
| 7026234 | 106              | 88                 | 104                     |
| 7026235 | 51*              | 39*                | 70                      |
| 7026236 | 61*              | 33*                | 75                      |
| 7026237 | 113              | 94                 | 107                     |
| 7026238 | 117              | 98                 | 111                     |
| 7026239 | 60*              | 32*                | 73                      |
| 7026240 | 45*              | 34*                | 61                      |
| 7026241 | 105              | 82                 | 101                     |
| 7026242 | 94               | 79                 | 96                      |
| 7026243 | 60*              | 57*                | 63                      |
| 7026245 | 119              | 108                | 114                     |
| Blank   | 113              | 124                | 108                     |
| LCS     | 120              | 131                | 116                     |
| LCSD    | 118              | 133                | 116                     |

|         |        |        |        |
|---------|--------|--------|--------|
| 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.





**eurofins**

For Lancaster Laboratories use only  
Acct. # 14739 Group # 1383730 Sample # 7026228-46  
Instructions on reverse side correspond with circled numbers.

Instructions on reverse side correspond with circled numbers

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

Issued by Dept. 40 Management  
7053.01



Acct. # 14739

For Lancaster Laboratories use only  
Group # 1383730 Sample # 7026228-46  
Instructions on reverse side correspond with circled numbers.

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

Issued by Dept. 40 Management  
7053.01

Environmental Sample Administration  
Receipt Documentation Log

1383730

Client/Project: Xom MayflowerShipping Container Sealed: YES NODate of Receipt: 4/18/13Custody Seal Present \*: YES NOTime of Receipt: 0915\* Custody seal was intact unless otherwise noted in the  
discrepancy sectionSource Code: SO-1Package: 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                                  | 2783           | 3.5              | TB                                    | WI                                             | Y                | B                              |          |
| 2                                  | ↓              | 3.2              | ↓                                     | ↓                                              | ↓                | ↓                              |          |
| 3                                  | ↓              | 3.3              | ↓                                     | ↓                                              | ↓                | ↓                              |          |
| 4                                  |                |                  |                                       |                                                |                  |                                |          |
| 5                                  |                |                  |                                       |                                                |                  |                                |          |
| 6                                  |                |                  |                                       |                                                |                  |                                |          |

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

Paperwork Discrepancy/Unpacking Problems:

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Unpacker Signature/Emp#: Jameslund / 208 Date/Time: 4/18/13 / 0945

Issued by Dept. 6042 Management

2174.06

# 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>J</b>                | estimated value – The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).                                                                                                                                                                                                                                                   |                 |                                  |
| <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 of gas 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.                                                                                                         |                 |                                  |

## 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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