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# ANNUAL MONITORING REPORT

YEAR(S):

2007

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# **FORMER BERTHA BARBER TANK BATTERY**

## **2008 Annual Groundwater Monitoring Report**

**May 2008**

**MARATHON OIL COMPANY**

**HOUSTON, TEXAS**

**Prepared By:**

**BBC International, Inc.**  
World-Wide Environmental Specialists

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**North American Production Operations**

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**HAND DELIVERED**

May 15, 2008

Mr. Wayne Price  
Environment Bureau - Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87504

**RE: 2007 Annual Groundwater Monitoring Report,  
Former Bertha Barber Tank Battery (BBTB) Remediation  
Lea County, NM**

Dear Mr. Price:

Please find enclosed Annual Groundwater Monitoring Report for former BBTB site. The annual report, which was prepared by BBC International., summarizes the groundwater monitoring and remediation activities associated with the Project in 2007.

If you have any questions or need any additional information, please contact me at (713) 296-3510 or at TCPersaud@MarathonOil.com.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Terry Persaud'.

Terry Persaud, P.E.  
Senior HES Professional

File: NM-BBTB - Annual Groundwater Monitoring Report

TCP\  
Enclosures

cc: Tom Breninger, Operations Superintendant - w/o Encls  
Paul Peacock, NAPO - HES Manager - w/o Encls

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## **1.0 INTRODUCTION**

The subject site is located in Section 5, Township 20 South, Range 37 East. The site is located approximately 1.5 miles south of Monument, New Mexico.

In November 1998, ARCADIS Geraghty & Miller, Inc. performed a preliminary soil investigation. The soil investigation consisted of 36 soil borings in the large tank bottom pit, the small tank bottom pit, the former tank pad, the location of the former oil/water separator, and the hardpan area west of the oil/water separator. In December 1998, five of the soil borings were converted into monitor wells.

Additional soil borings and monitor wells were placed to delineate the site in August 1999. Three monitor wells and three soil borings were added in December 2002 for further delineation in the saltwater evaporation pit.

The New Mexico Oil Conservation Division (NMOCD) gave permission to Marathon Oil Company (MOC) to discontinue sampling monitor well MW-10 as of March 6, 2003 due to potential impact from pipeline release up gradient of the site.

## **2.0 2008 GROUNDWATER MONITORING ACTIVITIES**

Fifteen monitoring wells were gauged and sampled on April 11 and April 14, 2008, by BBC International, Inc. (BBC). The livestock well water was not sampled since it was dry. MW-1 and MW-2 were the only monitor wells that had measurable free product hydrocarbons detected in 2008 at a thickness of 0.05 of a foot for MW-1 and a thickness of 0.01 of a foot for MW-2.

BBC followed standard sampling protocol. During the sampling event, the monitor wells were purged of three well volumes of water or until the wells were dry using a PVC bailer or electrical Grundfos Pump. Groundwater was allowed to recharge and samples were obtained using disposable Teflon samplers. Water samples were collected in clean glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in polystyrene drums and disposed of by BBC utilizing the NMOCD-approved disposal facility near Eunice, NM operated by Sundance Services.

### **2.1 GROUNDWATER ELEVATIONS**

The fifteen monitor wells were gauged from the top of the casing for depth to groundwater. A groundwater gradient map of the site can be found in Figure 1.

## **2.2 PURGING AND SAMPLING ACTIVITIES**

In April 2008, fifteen monitor wells were measured from the top of the casing for depth to groundwater, depth to LNAPL, LNAPL thickness, and corrected groundwater elevations prior to sampling (Table 1). All purged fluids were drummed, transported, and disposed of at Sundance Services NMOCD approved disposal facility near Eunice, NM for recycling and disposal.

The groundwater samples were sent to SPL Laboratory in Houston, Texas to be analyzed for BTEX (USEPA Method 8260-B), Chloride, Total Dissolved Solids (TDS), and metals (Fe, Mn, Ba). The results are summarized in Table 2 and can be viewed in Figure 2. Laboratory analytical results, QA/QC, and chain-of-custody reports for the groundwater samples collected and analyzed are included in Appendix I.

The April 2008 sampling event showed detections of Benzene at concentrations of 0.006 mg/L and 0.009 mg/L, respectively, in monitor wells MW-4 and MW-5. The Benzene detections are below the New Mexico Water Quality Control Commission Standards of 0.01 mg/L. All of the monitor wells detected chloride levels in exceedance of the New Mexico Water Quality Control Commission Standard of 250 mg/L.

## **3.0 2007 REMEDIATION**

In April of 2007, BBC conducted the soil remediation activities as approved by the NMOCD in February 2007. The details of the soil remediation were submitted to the NMOCD in a report by BBC dated May 2007 and titled *"Former Bertha Barber Tank Battery, 2007 Site Remediation Activities Report"*.

## **4.0 CONCLUSION**

Marathon Oil Company proposes to close this site by discontinuing the ground water sampling and plugging and abandoning the monitoring wells according to NMOCD guidelines.

This request for closure is based on not only the history and longevity of this site, but the analysis of the historical groundwater data and due to the fact that the soil remediation has been completed; therefore, either eliminating the contaminant sources by soil excavation or by partial soil excavation and the installation of impermeable liners over the source areas which eliminate the potential for downward hydraulic activity that could influence contaminates to the ground water.

Upon review of the contaminate levels over time, the hydrocarbon detection levels have been decreasing indicating natural degradation and attenuation while the hydrocarbon plume has stayed consistent in size indicating very slow or no migration. In addition, the chloride impacts have experienced similar results.

This indicates natural attenuation is occurring and will continue to do so. Therefore, the need for continuing monitoring is diminished and not necessary since there are not any nearby ground water receptors and the likelihood of any receptors in the near future is small.

In conclusion, considering the above information, Marathon Oil Company feels there is justification in closing this site.

## **5.0 LIMITATIONS**

BBC has prepared this Annual Monitoring Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

BBC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. BBC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. BBC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. BBC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Marathon Oil Company. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of BBC and/or Marathon.



# Tables

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Table 1: Historical Fluid Level Data  
Table 2: Historical BTEX Analytical Data  
April 2008

Former Bertha Barber

**December 2008**

Marathon Oil Company  
Houston, Texas

Prepared by:  
BBC International, Inc.

**BBC International, Inc.***World-Wide Environmental Specialists*

Phone: (505) 397-6388 \* Fax: (505) 397-0397 \* 1324 W. Marland \* PO Box 805 \* Hobbs, NM 88241

**Table 1.****Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-1    | 04/14/08    | 3561.57                                     | 31.73                           | 31.68                      | 0.04                           | 3529.88                                            |
|         | 04/14/07    | 3561.57                                     | 31.60                           | 31.00                      | 0.48                           | 3530.45                                            |
|         | 04/18/06    | 3561.57                                     | 32.90                           | 32.42                      | 0.38                           | 3529.05                                            |
|         | 03/03/05    | 3561.57                                     | 31.90                           | 31.77                      | 0.10                           | 3529.77                                            |
|         | 03/22/04    | 3561.57                                     | 39.23                           | 38.22                      | 0.81                           | 3523.15                                            |
|         | 12/22/03    | 3561.57                                     | 39.00                           | 38.15                      | 0.68                           | 3523.25                                            |
|         | 09/24/03    | 3561.57                                     | 38.08                           | 38.03                      | 0.04                           | 3523.53                                            |
|         | 06/16/03    | 3561.57                                     | 37.70                           | Sheen                      | 0                              | 3523.87                                            |
|         | 03/05/03    | 3561.57                                     | 37.55                           | 37.53                      | 0.02                           | 3524.04                                            |
|         | *12/18/2002 | 3561.57                                     | 37.62                           | 37.60                      | 0.02                           | 3523.97                                            |
|         | 09/25/02    | 3561.20                                     | 37.67                           | 37.55                      | 0.10                           | 3523.63                                            |
|         | 06/28/02    | 3561.20                                     | 37.38                           | 37.37                      | 0.01                           | 3523.83                                            |
|         | 03/22/02    | 3561.20                                     | 37.34                           | 37.30                      | 0.03                           | 3523.89                                            |
|         | 12/26/01    | 3561.20                                     | 37.33                           | 37.19                      | 0.11                           | 3523.98                                            |
|         | 09/27/01    | 3561.20                                     | 38.55                           | 38.48                      | 0.06                           | 3522.71                                            |
|         | 06/28/01    | 3561.20                                     | 38.15                           | 38.14                      | 0.01                           | 3523.06                                            |
|         | 03/19/01    | 3561.20                                     | 37.15                           | 37.14                      | 0.01                           | 3524.06                                            |
|         | 12/21/00    | 3561.20                                     | 37.14                           | 37.13                      | 0.01                           | 3524.07                                            |
|         | 09/27/00    | 3561.20                                     | 37.70                           | 37.65                      | 0.04                           | 3523.54                                            |
|         | 06/20/00    | 3561.20                                     | 37.77                           | 37.70                      | 0.06                           | 3523.49                                            |
|         | 03/30/00    | 3561.20                                     | 36.20                           | 36.19                      | 0.01                           | 3525.01                                            |
|         | 12/14/99    | 3561.20                                     | 36.03                           |                            | 0.03                           | 3525.19                                            |
|         | 09/22/99    | 3561.20                                     | 35.79                           |                            | sheen                          | 3525.41                                            |
|         | 08/27/99    | 3561.20                                     | 35.66                           |                            | 0.02                           | 3525.55                                            |
|         | 07/16/99    | 3561.20                                     | 35.48                           |                            | 0.005                          | 3525.72                                            |
|         | 03/31/99    | 3561.20                                     | 35.82                           |                            | 0.05                           | 3525.42                                            |
|         | 12/30/98    | 3561.20                                     | 35.83                           |                            | 0                              | 3525.37                                            |

**\*New survey data**

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**  
**Historical Fluid Level Data, December 1998 - April 2008**  
 Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-2    | 04/14/08    | 3562.10                                     | 32.25                           | 32.24                      | 0.01                           | 3529.86                                            |
|         | 04/14/07    | 3562.10                                     | 31.52                           |                            | 0                              | 3530.58                                            |
|         | 04/18/06    | 3562.10                                     | 32.44                           |                            | 0                              | 3529.66                                            |
|         | 03/03/05    | 3562.10                                     | 35.05                           |                            | 0                              | 3527.05                                            |
|         | 03/22/04    | 3562.10                                     | 39.02                           |                            | 0                              | 3523.08                                            |
|         | 12/22/03    | 3562.10                                     | 38.58                           |                            | 0                              | 3523.52                                            |
|         | 09/24/03    | 3562.10                                     | 38.36                           |                            | 0                              | 3523.74                                            |
|         | 06/16/03    | 3562.10                                     | 38.19                           |                            | 0                              | 3523.91                                            |
|         | 03/05/03    | 3562.10                                     | 38.05                           |                            | 0                              | 3524.05                                            |
|         | *12/18/2002 | 3562.10                                     | 38.15                           | 38.14                      | 0.01                           | 3523.96                                            |
|         | 09/25/02    | 3561.69                                     | 38.10                           | 38.06                      | 0.03                           | 3523.62                                            |
|         | 06/28/02    | 3561.69                                     | 37.85                           |                            | 0                              | 3523.84                                            |
|         | 03/22/02    | 3561.69                                     | 38.78                           |                            | 0                              | 3522.91                                            |
|         | 12/26/01    | 3561.69                                     | 37.70                           | 37.69                      | 0.01                           | 3524.00                                            |
|         | 09/27/01    | 3561.69                                     | 37.49                           | 37.48                      | 0.01                           | 3524.21                                            |
|         | 06/28/01    | 3561.69                                     | 37.16                           | 37.15                      | 0.01                           | 3524.54                                            |
|         | 03/19/01    | 3561.69                                     | 37.61                           | 37.60                      | 0.01                           | 3524.09                                            |
|         | 12/21/00    | 3561.69                                     | 37.60                           | 37.59                      | 0.01                           | 3524.10                                            |
|         | 09/27/00    | 3561.69                                     | 38.12                           | 38.11                      | 0.01                           | 3523.58                                            |
|         | 06/20/00    | 3561.69                                     | 38.12                           | 38.10                      | 0.02                           | 3523.59                                            |
|         | 03/30/00    | 3561.69                                     | 36.60                           | 36.59                      | 0.01                           | 3525.10                                            |
|         | 12/14/99    | 3561.69                                     | 36.62                           |                            | 0                              | 3525.07                                            |
|         | 09/22/99    | 3561.69                                     | 36.27                           |                            | 0                              | 3525.42                                            |
|         | 08/27/99    | 3561.69                                     | 36.13                           |                            | 0.01                           | 3525.57                                            |
|         | 07/16/99    | 3561.69                                     | 35.95                           |                            | 0                              | 3525.74                                            |
|         | 03/31/99    | 3561.69                                     | 36.33                           |                            | 0                              | 3525.36                                            |
|         | 12/30/98    | 3561.69                                     | 36.34                           |                            | 0                              | 3525.35                                            |

**\*New survey data**

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID     | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|-------------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| <b>MW-3</b> | 04/11/08    | 3563.40                                     | 33.57                           |                            | 0                              | 3529.83                                            |
|             | 04/14/07    | 3563.40                                     | 32.88                           |                            | 0                              | 3530.52                                            |
|             | 04/18/06    | 3563.40                                     | 33.57                           |                            | 0                              | 3529.83                                            |
|             | 03/03/05    | 3563.40                                     | 33.60                           |                            | 0                              | 3529.80                                            |
|             | 03/22/04    | 3563.40                                     | 40.08                           |                            | 0                              | 3523.32                                            |
|             | 12/22/03    | 3563.40                                     | 40.07                           |                            | 0                              | 3523.33                                            |
|             | 09/24/03    | 3563.40                                     | 39.88                           |                            | 0                              | 3523.52                                            |
|             | 06/16/03    | 3563.40                                     | 39.53                           |                            | 0                              | 3523.87                                            |
|             | 03/05/03    | 3563.40                                     | 39.39                           |                            | 0                              | 3524.01                                            |
|             | *12/18/2002 | 3563.40                                     | 39.49                           |                            | 0                              | 3523.91                                            |
|             | 09/25/02    | 3563.00                                     | 39.42                           | 39.41                      | 0.01                           | 3523.59                                            |
|             | 06/28/02    | 3563.00                                     | 39.19                           |                            | 0                              | 3523.81                                            |
|             | 03/22/02    | 3563.00                                     | 39.11                           |                            | 0                              | 3523.89                                            |
|             | 12/26/01    | 3563.00                                     | 39.05                           |                            | 0                              | 3523.95                                            |
|             | 09/27/01    | 3563.00                                     | 38.95                           |                            | 0                              | 3524.05                                            |
|             | 06/28/01    | 3563.00                                     | 38.63                           |                            | 0                              | 3524.37                                            |
|             | 03/19/01    | 3563.00                                     | 38.19                           |                            | 0                              | 3524.81                                            |
|             | 12/21/00    | 3563.00                                     | 38.11                           |                            | 0                              | 3524.89                                            |
|             | 09/27/00    | 3563.00                                     | 37.88                           |                            | 0                              | 3525.12                                            |
|             | 06/20/00    | 3563.00                                     | 38.56                           |                            | 0                              | 3524.44                                            |
|             | 03/30/00    | 3563.00                                     | 38.10                           |                            | 0                              | 3524.90                                            |
|             | 12/14/99    | 3563.00                                     | 38.10                           |                            | 0                              | 3524.90                                            |
|             | 09/22/99    | 3563.00                                     | 37.59                           |                            | 0                              | 3525.41                                            |
|             | 08/27/99    | 3563.00                                     | 37.48                           |                            | 0                              | 3525.52                                            |
|             | 07/16/99    | 3563.00                                     | 37.31                           |                            | 0                              | 3525.69                                            |
|             | 03/31/99    | 3563.00                                     | 37.67                           |                            | 0                              | 3525.33                                            |
|             | 12/30/98    | 3563.00                                     | 37.65                           |                            | 0                              | 3525.35                                            |
| <b>MW-4</b> | 04/14/08    | 3563.43                                     | 33.56                           |                            | 0                              | 3529.87                                            |
|             | 04/14/07    | 3563.43                                     | 32.90                           |                            | 0                              | 3530.53                                            |
|             | 04/18/06    | 3563.43                                     | 34.32                           |                            | 0                              | 3529.11                                            |
|             | 03/03/05    | 3563.43                                     | 33.61                           |                            | 0                              | 3529.82                                            |
|             | 03/22/04    | 3563.43                                     | 40.09                           |                            | 0                              | 3523.34                                            |
|             | 12/22/03    | 3563.43                                     | 39.95                           |                            | 0                              | 3523.48                                            |
|             | 09/24/03    | 3563.43                                     | 39.73                           |                            | 0                              | 3523.70                                            |
|             | 06/16/03    | 3563.43                                     | 39.52                           |                            | 0                              | 3523.91                                            |
|             | 03/05/03    | 3563.43                                     | 39.39                           |                            | 0                              | 3524.04                                            |
|             | *12/18/2002 | 3563.43                                     | 39.45                           |                            | 0                              | 3523.98                                            |
|             | 09/25/02    | 3563.01                                     | 38.65                           | 38.61                      | 0.03                           | 3524.39                                            |
|             | 06/28/02    | 3563.01                                     | 38.66                           | 38.63                      | 0.02                           | 3524.37                                            |
|             | 03/22/02    | 3563.01                                     | 39.11                           | 39.10                      | 0.01                           | 3523.91                                            |
|             | 12/26/01    | 3563.01                                     | 39.05                           | 39.03                      | 0.02                           | 3523.98                                            |
|             | 09/27/01    | 3563.01                                     | 38.92                           | 38.82                      | 0.08                           | 3524.17                                            |
|             | 06/28/01    | 3563.01                                     | 38.60                           |                            | 0                              | 3524.41                                            |
|             | 03/19/01    | 3563.01                                     | 38.16                           |                            | 0                              | 3524.85                                            |
|             | 12/21/00    | 3563.01                                     | 38.10                           |                            | 0                              | 3524.91                                            |
|             | 09/27/00    | 3563.01                                     | 37.86                           |                            | 0                              | 3525.15                                            |
|             | 06/20/00    | 3563.01                                     | 38.26                           |                            | 0                              | 3524.75                                            |
|             | 03/30/00    | 3563.01                                     | 38.10                           |                            | 0                              | 3524.91                                            |
|             | 12/14/99    | 3563.01                                     | 37.85                           |                            | 0                              | 3525.16                                            |
|             | 09/22/99    | 3563.01                                     | 37.57                           |                            | 0                              | 3525.44                                            |
|             | 08/27/99    | 3563.01                                     | 37.46                           |                            | 0                              | 3525.55                                            |
|             | 07/16/99    | 3563.01                                     | 37.28                           |                            | 0                              | 3525.73                                            |
|             | 03/31/99    | 3563.01                                     | 37.66                           |                            | 0                              | 3525.35                                            |
|             | 12/30/98    | 3563.01                                     | 37.66                           |                            | 0                              | 3525.35                                            |

\*New survey data

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-5    | 04/14/08    | 3561.49                                     | 31.63                           |                            | 0                              | 3529.86                                            |
|         | 04/14/07    | 3561.49                                     | 32.20                           |                            | 0                              | 3529.29                                            |
|         | 04/18/06    | 3561.49                                     | 32.40                           |                            | 0                              | 3529.09                                            |
|         | 03/03/05    | 3561.49                                     | 32.73                           |                            | 0                              | 3528.76                                            |
|         | 03/22/04    | 3561.49                                     | 38.20                           |                            | 0                              | 3523.29                                            |
|         | 12/22/03    | 3561.49                                     | 38.12                           |                            | 0                              | 3523.37                                            |
|         | 09/24/03    | 3561.49                                     | 37.95                           |                            | 0                              | 3523.54                                            |
|         | 06/16/03    | 3561.49                                     | 37.60                           | Sheen                      | 0                              | 3523.89                                            |
|         | 03/05/03    | 3561.49                                     | 37.46                           | Sheen                      | 0                              | 3524.03                                            |
|         | *12/18/2002 | 3561.49                                     | 37.56                           | 37.54                      | 0.02                           | 3523.95                                            |
|         | 09/25/02    | 3561.10                                     | 37.52                           | 37.48                      | 0.03                           | 3523.61                                            |
|         | 06/28/02    | 3561.10                                     | 37.31                           | 37.29                      | 0.02                           | 3523.81                                            |
|         | 03/22/02    | 3561.10                                     | 37.20                           |                            | 0                              | 3523.90                                            |
|         | 12/26/01    | 3561.10                                     | 37.21                           | 37.10                      | 0.09                           | 3523.98                                            |
|         | 09/27/01    | 3561.10                                     | 36.98                           | 36.47                      | 0.41                           | 3524.53                                            |
|         | 06/28/01    | 3561.10                                     | 36.69                           |                            | 0                              | 3524.41                                            |
|         | 03/19/01    | 3561.10                                     | 36.13                           |                            | 0                              | 3524.97                                            |
|         | 12/21/00    | 3561.10                                     | 36.15                           |                            | 0                              | 3524.95                                            |
|         | 09/27/00    | 3561.10                                     | 35.98                           |                            | 0                              | 3525.12                                            |
|         | 06/20/00    | 3561.10                                     | 36.34                           |                            | 0                              | 3524.76                                            |
|         | 03/30/00    | 3561.10                                     | 36.10                           |                            | 0                              | 3525.00                                            |
|         | 12/14/99    | 3561.10                                     | 35.95                           |                            | 0                              | 3525.15                                            |
|         | 09/22/99    | 3561.10                                     | 35.68                           |                            | 0                              | 3525.42                                            |
|         | 08/27/99    | 3561.10                                     | 35.56                           |                            | 0                              | 3525.54                                            |
|         | 07/16/99    | 3561.10                                     | 35.38                           |                            | 0                              | 3525.72                                            |
|         | 03/31/99    | 3561.10                                     | 35.75                           |                            | 0                              | 3525.35                                            |
|         | 12/30/98    | 3561.10                                     | 35.73                           |                            | 0                              | 3525.37                                            |
| MW-6    | 04/11/08    | 3561.65                                     | 32.78                           |                            | 0                              | 3528.87                                            |
|         | 04/14/07    | 3561.65                                     | 31.84                           |                            | 0                              | 3529.81                                            |
|         | 04/18/06    | 3561.65                                     | 32.39                           |                            | 0                              | 3529.26                                            |
|         | 03/03/05    | 3561.65                                     | 34.42                           |                            | 0                              | 3527.23                                            |
|         | 03/22/04    | 3561.65                                     | 38.30                           |                            | 0                              | 3523.35                                            |
|         | 12/22/03    | 3561.65                                     | 38.29                           |                            | 0                              | 3523.36                                            |
|         | 09/24/03    | 3561.65                                     | 38.10                           |                            | 0                              | 3523.55                                            |
|         | 06/16/03    | 3561.65                                     | 37.76                           |                            | 0                              | 3523.89                                            |
|         | 03/05/03    | 3561.65                                     | 37.61                           |                            | 0                              | 3524.04                                            |
|         | *12/18/2002 | 3561.65                                     | 37.70                           |                            | 0                              | 3523.95                                            |
|         | 09/25/02    | 3561.25                                     | 37.63                           |                            | 0                              | 3523.62                                            |
|         | 06/28/02    | 3561.25                                     | 37.40                           |                            | 0                              | 3523.85                                            |
|         | 03/22/02    | 3561.25                                     | 37.32                           |                            | 0                              | 3523.93                                            |
|         | 12/26/01    | 3561.25                                     | 37.25                           |                            | 0                              | 3524.00                                            |
|         | 09/27/01    | 3561.25                                     | 37.02                           |                            | 0                              | 3524.23                                            |
|         | 06/28/01    | 3561.25                                     | 36.54                           |                            | 0                              | 3524.71                                            |
|         | 03/19/01    | 3561.25                                     | 36.80                           |                            | 0                              | 3524.45                                            |
|         | 12/21/00    | 3561.25                                     | 36.13                           |                            | 0                              | 3525.12                                            |
|         | 09/27/00    | 3561.25                                     | 36.06                           |                            | 0                              | 3525.19                                            |
|         | 06/20/00    | 3561.25                                     | 36.39                           |                            | 0                              | 3524.86                                            |
|         | 03/30/00    | 3561.25                                     | 36.29                           |                            | 0                              | 3524.96                                            |
|         | 12/14/99    | 3561.25                                     | 36.10                           |                            | 0                              | 3525.15                                            |
|         | 09/22/99    | 3561.25                                     | 35.75                           |                            | 0                              | 3525.50                                            |
|         | 08/27/99    | 3561.25                                     | 35.69                           |                            | 0                              | 3525.56                                            |

\*New survey data

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-7    | 04/11/08    | 3562.70                                     | 32.91                           |                            | 0                              | 3529.79                                            |
|         | 04/14/07    | 3562.70                                     | 32.38                           |                            | 0                              | 3530.32                                            |
|         | 04/18/06    | 3562.70                                     | 33.69                           |                            | 0                              | 3529.01                                            |
|         | 03/04/05    | 3562.70                                     | 33.43                           |                            | 0                              | 3529.27                                            |
|         | 03/22/04    | 3562.70                                     | 39.78                           |                            | 0                              | 3522.92                                            |
|         | 12/22/03    | 3562.70                                     | 39.75                           |                            | 0                              | 3522.95                                            |
|         | 09/24/03    | 3562.70                                     | 39.60                           |                            | 0                              | 3523.10                                            |
|         | 06/16/03    | 3562.70                                     | 39.16                           |                            | 0                              | 3523.54                                            |
|         | 03/05/03    | 3562.70                                     | 38.97                           |                            | 0                              | 3523.73                                            |
|         | *12/18/2002 | 3562.70                                     | 39.07                           |                            | 0                              | 3523.63                                            |
|         | 09/25/02    | 3562.44                                     | 39.01                           | 38.99                      | 0.02                           | 3523.45                                            |
|         | 06/28/02    | 3562.44                                     | 38.76                           |                            | 0                              | 3523.68                                            |
|         | 03/22/02    | 3562.44                                     | 38.65                           | 38.64                      | 0.01                           | 3523.80                                            |
|         | 12/26/01    | 3562.44                                     | 38.62                           | 38.61                      | 0.01                           | 3523.83                                            |
|         | 09/27/01    | 3562.44                                     | 38.43                           | 38.42                      | 0.01                           | 3524.02                                            |
|         | 06/28/01    | 3562.44                                     | 37.90                           | 37.89                      | 0.01                           | 3524.55                                            |
|         | 03/19/01    | 3562.44                                     | 37.58                           | 37.57                      | 0.01                           | 3524.87                                            |
|         | 12/21/00    | 3562.44                                     | 37.70                           | 37.65                      | 0.04                           | 3524.79                                            |
|         | 09/27/00    | 3562.44                                     | 37.76                           | 37.75                      | 0.01                           | 3524.69                                            |
|         | 06/20/00    | 3562.44                                     | 37.91                           | 37.73                      | 0.14                           | 3524.67                                            |
|         | 03/30/00    | 3562.44                                     | 37.60                           | 37.55                      | 0.04                           | 3524.88                                            |
|         | 12/14/99    | 3562.44                                     | 37.51                           |                            | 0                              | 3524.93                                            |
|         | 09/22/99    | 3562.44                                     | 38.20                           |                            | 0                              | 3524.24                                            |
|         | 08/27/99    | 3562.44                                     | 38.15                           |                            | 0                              | 3524.29                                            |
| MW-8    | 04/11/08    | 3561.82                                     | 31.98                           |                            | 0                              | 3529.84                                            |
|         | 04/14/07    | 3561.82                                     | 31.90                           |                            | 0                              | 3529.92                                            |
|         | 04/18/06    | 3561.82                                     | 33.74                           |                            | 0                              | 3528.08                                            |
|         | 04/22/05    | 3561.82                                     | 32.43                           |                            | 0                              | 3529.39                                            |
|         | 03/22/04    | 3561.82                                     | 38.96                           |                            | 0                              | 3522.86                                            |
|         | 12/22/03    | 3561.82                                     | 38.92                           |                            | 0                              | 3522.90                                            |
|         | 09/24/03    | 3561.82                                     | 38.71                           |                            | 0                              | 3523.11                                            |
|         | 06/16/03    | 3561.82                                     | 38.30                           |                            | 0                              | 3523.52                                            |
|         | 03/05/03    | 3561.82                                     | 38.10                           |                            | 0                              | 3523.72                                            |
|         | *12/18/2002 | 3561.82                                     | 38.20                           |                            | 0                              | 3523.62                                            |
|         | 09/25/02    | 3561.39                                     | 38.15                           |                            | 0                              | 3523.24                                            |
|         | 06/28/02    | 3561.39                                     | 37.87                           |                            | 0                              | 3523.52                                            |
|         | 03/22/02    | 3561.39                                     | 37.80                           |                            | 0                              | 3523.59                                            |
|         | 12/26/01    | 3561.39                                     | 37.74                           |                            | 0                              | 3523.65                                            |
|         | 09/27/01    | 3561.39                                     | 37.51                           |                            | 0                              | 3523.88                                            |
|         | 06/28/01    | 3561.39                                     | 36.98                           |                            | 0                              | 3524.41                                            |
|         | 03/19/01    | 3561.39                                     | 36.51                           |                            | 0                              | 3524.88                                            |
|         | 12/21/00    | 3561.39                                     | 36.50                           |                            | 0                              | 3524.89                                            |
|         | 09/27/00    | 3561.39                                     | 36.61                           |                            | 0                              | 3524.78                                            |
|         | 06/20/00    | 3561.39                                     | 36.88                           |                            | 0                              | 3524.51                                            |
|         | 03/30/00    | 3561.39                                     | 36.65                           |                            | 0                              | 3524.74                                            |
|         | 12/14/99    | 3561.39                                     | 36.44                           |                            | 0                              | 3524.95                                            |
|         | 09/22/99    | 3561.39                                     | 37.26                           |                            | 0                              | 3524.13                                            |
|         | 08/27/99    | 3561.39                                     | 37.21                           |                            | 0                              | 3524.18                                            |

\*New survey data

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-9    | 04/11/08    | 3563.95                                     | 31.13                           |                            | 0                              | 3532.82                                            |
|         | 04/14/07    | 3563.95                                     | 31.15                           |                            | 0                              | 3532.80                                            |
|         | 04/18/06    | 3563.95                                     | 31.80                           |                            | 0                              | 3532.15                                            |
|         | 03/03/05    | 3563.95                                     | 31.80                           |                            | 0                              | 3532.15                                            |
|         | 03/22/04    | 3563.95                                     | 40.45                           |                            | 0                              | 3523.50                                            |
|         | 12/22/03    | 3563.95                                     | 40.84                           |                            | 0                              | 3523.11                                            |
|         | 09/24/03    | 3563.95                                     | 40.62                           |                            | 0                              | 3523.33                                            |
|         | 06/16/03    | 3563.95                                     | 40.22                           |                            | 0                              | 3523.73                                            |
|         | 03/05/03    | 3563.95                                     | 40.04                           |                            | 0                              | 3523.91                                            |
|         | *12/18/2002 | 3563.95                                     | 40.15                           |                            | 0                              | 3523.80                                            |
|         | 09/25/02    | 3561.59                                     | 41.11                           | 41.09                      | 0.02                           | 3520.50                                            |
|         | 06/28/02    | 3561.59                                     | 39.87                           | 39.85                      | 0.02                           | 3521.74                                            |
|         | 03/22/02    | 3563.59                                     | 39.39                           | 39.37                      | 0.02                           | 3524.22                                            |
|         | 12/26/01    | 3563.59                                     | 39.82                           | 39.65                      | 0.14                           | 3523.91                                            |
|         | 09/27/01    | 3563.59                                     | 39.62                           | 39.40                      | 0.18                           | 3524.15                                            |
|         | 06/28/01    | 3563.59                                     | 38.99                           |                            | 0                              | 3524.60                                            |
|         | 03/19/01    | 3563.59                                     | 38.65                           |                            | 0                              | 3524.94                                            |
|         | 12/21/00    | 3563.59                                     | 38.60                           |                            | 0                              | 3524.99                                            |
|         | 09/27/00    | 3563.59                                     | 38.60                           |                            | 0                              | 3524.99                                            |
|         | 06/20/00    | 3563.59                                     | 38.89                           |                            | 0                              | 3524.70                                            |
|         | 03/30/00    | 3563.59                                     | 38.70                           |                            | 0                              | 3524.89                                            |
|         | 12/14/99    | 3563.59                                     | 38.48                           |                            | 0                              | 3525.11                                            |
|         | 09/22/99    | 3563.59                                     | 36.23                           |                            | 0                              | 3527.36                                            |
|         | 08/27/99    | 3563.59                                     | 36.14                           |                            | 0                              | 3527.45                                            |
| **MW-10 | 04/22/05    | 3560.88                                     | 31.22                           |                            | 0                              | 3529.66                                            |
|         | 12/22/03    | 3560.88                                     |                                 |                            |                                |                                                    |
|         | 09/24/03    | 3560.88                                     |                                 |                            |                                |                                                    |
|         | 06/16/03    | 3560.88                                     |                                 |                            |                                |                                                    |
|         | 03/05/03    | 3560.88                                     | 36.83                           | 36.82                      | 0.01                           | 3524.06                                            |
|         | *12/18/2002 | 3560.88                                     | 36.92                           | 36.91                      | 0.01                           | 3523.97                                            |
|         | 09/25/02    | 3560.51                                     | 36.84                           | 36.82                      | 0.02                           | 3523.69                                            |
|         | 06/28/02    | 3560.51                                     | 36.61                           | 36.60                      | 0.01                           | 3523.91                                            |
|         | 03/22/02    | 3560.51                                     | 36.55                           | 36.53                      | 0.01                           | 3523.98                                            |
|         | 12/26/01    | 3560.51                                     | 36.98                           | 36.34                      | 0.48                           | 3524.01                                            |
|         | 09/27/01    | 3560.51                                     | 36.75                           | 36.12                      | 0.47                           | 3524.23                                            |
|         | 06/28/01    | 3560.51                                     | 36.26                           | 35.63                      | 0.47                           | 3524.72                                            |
|         | 03/19/01    | 3560.51                                     | 35.52                           | 35.48                      | 0.03                           | 3525.02                                            |
|         | 12/21/00    | 3560.51                                     | 35.53                           | 35.52                      | 0.01                           | 3524.99                                            |
|         | 09/27/00    | 3560.51                                     | 35.56                           | 35.55                      | 0.01                           | 3524.96                                            |
|         | 06/20/00    | 3560.51                                     | 35.55                           | 35.54                      | 0.01                           | 3524.97                                            |
|         | 03/30/00    | 3560.51                                     | 35.50                           | 35.49                      | 0.01                           | 3525.02                                            |
|         | 12/14/99    | 3560.51                                     | 35.33                           |                            | 0                              | 3525.18                                            |
|         | 09/22/99    | 3560.51                                     | 34.96                           |                            | 0                              | 3525.55                                            |
|         | 08/27/99    | 3560.51                                     | 34.87                           |                            | 0                              | 3525.64                                            |

**\*New survey data**

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID             | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------------------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| <b>MW-11</b>        | 04/11/08    | 3565.81                                     | 36.09                           |                            | 0                              | 3529.72                                            |
|                     | 04/14/07    | 3565.81                                     | 35.55                           |                            | 0                              | 3530.26                                            |
|                     | 04/18/06    | 3565.81                                     | 36.64                           |                            | 0                              | 3529.17                                            |
|                     | 03/03/05    | 3565.81                                     | 36.68                           |                            | 0                              | 3529.13                                            |
|                     | 03/22/04    | 3565.81                                     | 43.12                           |                            | 0                              | 3522.69                                            |
|                     | 12/22/03    | 3565.81                                     | 43.08                           |                            | 0                              | 3522.73                                            |
|                     | 09/24/03    | 3565.81                                     | 42.90                           |                            | 0                              | 3522.91                                            |
|                     | 06/16/03    | 3565.81                                     | 42.47                           |                            | 0                              | 3523.34                                            |
|                     | 03/05/03    | 3565.81                                     | 42.26                           |                            | 0                              | 3523.55                                            |
|                     | *12/18/2002 | 3565.81                                     | 42.34                           |                            | 0                              | 3523.47                                            |
|                     | 09/25/02    | 3565.44                                     | 42.32                           |                            | 0                              | 3523.12                                            |
|                     | 06/28/02    | 3565.44                                     | 42.04                           |                            | 0                              | 3523.40                                            |
|                     | 03/22/02    | 3565.44                                     | 41.95                           |                            | 0                              | 3523.49                                            |
|                     | 12/26/01    | 3565.44                                     | 41.91                           |                            | 0                              | 3523.53                                            |
|                     | 09/27/01    | 3565.44                                     | 41.71                           |                            | 0                              | 3523.73                                            |
|                     | 06/28/01    | 3565.44                                     | 41.16                           |                            | 0                              | 3524.28                                            |
|                     | 03/19/01    | 3565.44                                     | 39.76                           |                            | 0                              | 3525.68                                            |
|                     | 12/21/00    | 3565.44                                     | 40.01                           |                            | 0                              | 3525.43                                            |
|                     | 09/27/00    | 3565.44                                     | 39.82                           |                            | 0                              | 3525.62                                            |
|                     | 06/20/00    | 3565.44                                     | 40.10                           |                            | 0                              | 3525.34                                            |
|                     | 03/30/00    | 3565.44                                     | 39.80                           |                            | 0                              | 3525.64                                            |
|                     | 12/14/99    | 3565.44                                     | 40.61                           |                            | 0                              | 3524.83                                            |
|                     | 09/22/99    | 3565.44                                     | 40.37                           |                            | 0                              | 3525.07                                            |
|                     | 08/27/99    | 3565.44                                     | 40.34                           |                            | 0                              | 3525.10                                            |
| <b>MW-12 (PZ-2)</b> | 04/11/08    | 3562.46                                     | 32.73                           |                            | 0                              | 3529.73                                            |
|                     | 04/14/07    | 3562.46                                     | 32.90                           |                            | 0                              | 3529.56                                            |
|                     | 04/18/06    | 3562.46                                     | 33.62                           |                            | 0                              | 3528.84                                            |
|                     | 04/22/05    | 3562.46                                     | 33.23                           |                            | 0                              | 3529.23                                            |
|                     | 03/22/04    | 3562.46                                     | 39.25                           |                            | 0                              | 3523.21                                            |
|                     | 12/22/03    | 3562.46                                     | 39.22                           |                            | 0                              | 3523.24                                            |
|                     | 09/24/03    | 3562.46                                     | 39.03                           |                            | 0                              | 3523.43                                            |
|                     | 06/16/03    | 3562.46                                     | 38.68                           |                            | 0                              | 3523.78                                            |
|                     | 03/05/03    | 3562.46                                     | 38.54                           |                            | 0                              | 3523.92                                            |
|                     | *12/18/2002 | 3562.46                                     | 38.62                           |                            | 0                              | 3523.84                                            |
|                     | 09/25/02    | 3562.11                                     | 38.53                           |                            | 0                              | 3523.58                                            |
|                     | 06/28/02    | 3562.11                                     | 38.30                           |                            | 0                              | 3523.81                                            |
|                     | 03/22/02    | 3562.11                                     | 38.22                           |                            | 0                              | 3523.89                                            |
|                     | 12/26/01    | 3562.11                                     | 37.15                           |                            | 0                              | 3524.96                                            |
|                     | 09/27/01    | 3562.11                                     | 37.90                           |                            | 0                              | 3524.21                                            |
|                     | 06/28/01    | 3562.11                                     | 37.45                           |                            | 0                              | 3524.66                                            |
|                     | 03/19/01    | 3562.11                                     | 37.26                           |                            | 0                              | 3524.85                                            |
|                     | 12/21/00    | 3562.11                                     | 37.23                           |                            | 0                              | 3524.88                                            |
|                     | 09/27/00    | 3562.11                                     | 37.09                           |                            | 0                              | 3525.02                                            |
|                     | 06/20/00    | 3562.11                                     | 37.34                           |                            | 0                              | 3524.77                                            |
|                     | 03/30/00    | 3562.11                                     | 37.23                           |                            | 0                              | 3524.88                                            |
|                     | 12/14/99    | 3562.11                                     | 36.95                           |                            | 0                              | 3525.16                                            |
|                     | 09/22/99    | 3562.11                                     | 36.69                           |                            | 0                              | 3525.42                                            |
|                     | 08/27/99    | 3562.11                                     | 36.65                           |                            | 0                              | 3525.46                                            |

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Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

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**Table 1.**  
**Historical Fluid Level Data, December 1998 - April 2008**  
Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID      | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|--------------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-13 (PZ-1) | 04/14/08    | 3560.05                                     | 30.20                           |                            | 0                              | 3529.85                                            |
|              | 04/14/07    | 3560.05                                     | 29.55                           |                            | 0                              | 3530.50                                            |
|              | 04/18/06    | 3560.05                                     | 44.03                           |                            | 0                              | 3516.02                                            |
|              | 03/03/05    | 3560.05                                     | 30.20                           |                            | 0                              | 3529.85                                            |
|              | 03/22/04    | 3560.05                                     | 36.78                           |                            | 0                              | 3523.27                                            |
|              | 12/22/03    | 3560.05                                     | 36.72                           |                            | 0                              | 3523.33                                            |
|              | 09/24/03    | 3560.05                                     | 36.51                           |                            | 0                              | 3523.54                                            |
|              | 06/16/03    | 3560.05                                     | 36.17                           |                            | 0                              | 3523.88                                            |
|              | 03/05/03    | 3560.05                                     | 36.03                           |                            | 0                              | 3524.02                                            |
|              | *12/18/2002 | 3560.05                                     | 36.12                           |                            | 0                              | 3523.93                                            |
|              | 09/25/02    | 3559.67                                     | 36.05                           |                            | 0                              | 3523.62                                            |
|              | 06/28/02    | 3559.67                                     | 35.82                           |                            | 0                              | 3523.85                                            |
|              | 03/22/02    | 3559.67                                     | 35.76                           |                            | 0                              | 3523.91                                            |
|              | 12/26/01    | 3559.67                                     | 35.67                           |                            | 0                              | 3524.00                                            |
|              | 09/27/01    | 3559.67                                     | 35.52                           |                            | 0                              | 3524.15                                            |
|              | 06/28/01    | 3559.67                                     | 34.95                           |                            | 0                              | 3524.72                                            |
|              | 03/19/01    | 3559.67                                     | 34.84                           |                            | 0                              | 3524.83                                            |
|              | 12/21/00    | 3559.67                                     | 34.75                           |                            | 0                              | 3524.92                                            |
|              | 09/27/00    | 3559.67                                     | 34.49                           |                            | 0                              | 3525.18                                            |
|              | 06/20/00    | 3559.67                                     | 34.90                           |                            | 0                              | 3524.77                                            |
|              | 03/30/00    | 3559.67                                     | 34.80                           |                            | 0                              | 3524.87                                            |
|              | 12/14/99    | 3559.67                                     | 34.96                           |                            | 0                              | 3524.71                                            |
|              | 09/22/99    | 3559.67                                     | 34.20                           |                            | 0                              | 3525.47                                            |
|              | 08/27/99    | 3559.67                                     | 34.09                           |                            | 0                              | 3525.58                                            |
| MW-14        | 04/11/08    | 3562.15                                     | 32.29                           |                            | 0                              | 3529.86                                            |
|              | 04/14/07    | 3562.15                                     | 31.87                           |                            | 0                              | 3530.28                                            |
|              | 04/18/06    | 3562.15                                     | 33.08                           |                            | 0                              | 3529.07                                            |
|              | 03/03/05    | 3562.15                                     | 32.53                           |                            | 0                              | 3529.62                                            |
|              | 03/22/04    | 3562.15                                     | 39.25                           |                            | 0                              | 3522.90                                            |
|              | 12/22/03    | 3562.15                                     | 39.20                           |                            | 0                              | 3522.95                                            |
|              | 09/24/03    | 3562.15                                     | 39.00                           |                            | 0                              | 3523.15                                            |
|              | 06/16/03    | 3562.15                                     | 38.58                           |                            | 0                              | 3523.57                                            |
|              | 03/05/03    | 3562.15                                     | 38.38                           |                            | 0                              | 3523.77                                            |
|              | *12/18/2002 | 3562.15                                     | 38.47                           |                            | 0                              | 3523.68                                            |
| MW-15        | 04/11/08    | 3562.19                                     | 32.39                           |                            | 0                              | 3529.80                                            |
|              | 04/14/07    | 3562.19                                     | 31.85                           |                            | 0                              | 3530.34                                            |
|              | 04/18/06    | 3562.19                                     | 33.20                           |                            | 0                              | 3528.99                                            |
|              | 03/03/05    | 3562.19                                     | 32.93                           |                            | 0                              | 3529.26                                            |
|              | 03/22/04    | 3562.19                                     | 39.43                           |                            | 0                              | 3522.76                                            |
|              | 12/22/03    | 3562.19                                     | 39.39                           |                            | 0                              | 3522.80                                            |
|              | 09/24/03    | 3562.19                                     | 39.19                           |                            | 0                              | 3523.00                                            |
|              | 06/16/03    | 3562.19                                     | 38.78                           |                            | 0                              | 3523.41                                            |
|              | 03/05/03    | 3562.19                                     | 38.55                           |                            | 0                              | 3523.64                                            |
|              | *12/18/2002 | 3562.19                                     | 38.65                           |                            | 0                              | 3523.54                                            |

**\*New survey data**

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 1.**
**Historical Fluid Level Data, December 1998 - April 2008**

Marathon Oil Company, Former Bertha Barber Tank Battery, Lea County, New Mexico

| Well ID | Date        | Measuring Point<br>Elevation<br>(feet amsl) | Depth to<br>Water<br>(feet bmp) | Depth to Product<br>(feet) | Product<br>Thickness<br>(feet) | Corrected Water-<br>Level Elevation<br>(feet amsl) |
|---------|-------------|---------------------------------------------|---------------------------------|----------------------------|--------------------------------|----------------------------------------------------|
| MW-16   | 04/11/08    | 3566.51                                     | 33.02                           |                            | 0                              | 3533.49                                            |
|         | 04/14/07    | 3566.51                                     | 36.79                           |                            | 0                              | 3529.72                                            |
|         | 04/18/06    | 3566.51                                     | 37.60                           |                            | 0                              | 3528.91                                            |
|         | 03/03/05    | 3566.51                                     | 37.40                           |                            | 0                              | 3529.11                                            |
|         | 03/22/04    | 3566.51                                     | 43.64                           |                            | 0                              | 3522.87                                            |
|         | 12/22/03    | 3566.51                                     | 43.58                           |                            | 0                              | 3522.93                                            |
|         | 09/24/03    | 3566.51                                     | 43.38                           |                            | 0                              | 3523.13                                            |
|         | 06/16/03    | 3566.51                                     | 42.99                           |                            | 0                              | 3523.52                                            |
|         | 03/05/03    | 3566.51                                     | 42.80                           |                            | 0                              | 3523.71                                            |
|         | *12/18/2002 | 3566.51                                     | 42.87                           |                            | 0                              | 3523.64                                            |

**\*New survey data**

Water level elevations corrected for condensate using a SG of 0.80

\*\*Water level elevations corrected for condensate using a SG of 0.75.

feet amsl=Ft above mean sea level

feet bmp=Ft below measuring point

**Table 2. Historical BTEX Analytical Data  
Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID       | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|---------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC          | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| MW-1          | 4/9/1999    | 5              | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 7/15/1999   | <500           | <500                | <500           | NS              | NS                 | <1000                |                    |                 |
|               | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|               | 3/14/2007   |                |                     |                |                 |                    |                      |                    |                 |
|               | 4/14/2008   |                |                     |                |                 |                    |                      |                    |                 |
| MW-2          | 4/9/1999    | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 7/15/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 9/23/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|               | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
| (Duplicate)   | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|               | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
| (Duplicate)   | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|               | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|               | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|               | 3/22/2004   | <1             | <1                  | <1             |                 |                    | 1.2                  |                    |                 |
| (Duplicate)   | 3/22/2004   | <1             | <1                  | <1             |                 |                    | 1                    |                    |                 |
|               | 3/4/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | 1.37               |                 |
|               | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|               | 3/14/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 374             |
|               | 4/14/2008   |                |                     |                |                 |                    |                      |                    |                 |
| MW-3          | 4/9/1999    | 100            | 14                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 7/15/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 9/23/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 3/30/2000   | <5             | <5                  | 11             | <5              | <10                | ND                   |                    |                 |
| (Duplicate)** | 3/30/2000   | 54             | 8.6                 | <5             | <5              | <10                | ND                   |                    |                 |
|               | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|               | 9/28/2000   | <5             | <5.0                | <5             | <5              | <10                | <10                  |                    |                 |
|               | 12/21/2000  | <5             | <5                  | <5             | NS              | NS                 | 10                   |                    |                 |
|               | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|               | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|               | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|               | 9/25/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|               | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|               | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|               | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|               | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|               | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|               | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|               | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|               | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|               | 3/13/2007   | 0.0111         | ND                  | ND             | ND              | ND                 | ND                   | 0.0112             | 426             |
|               | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 358             |

**Table 2. Historical BTEX Analytical Data  
Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID     | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|-------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC        | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| MW-4        | 4/9/1999    | 121            | 77                  | 43             | NS              | NS                 | 60                   |                    |                 |
|             | 7/15/1999   | 43             | 28                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 9/23/1999   | 18             | 12                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/30/2000   | 54             | 7.5                 | 8.7            | <5              | <10                | ND                   |                    |                 |
|             | 6/20/2000   | 19             | <5.0                | <5             | <5              | <10                | <10                  |                    |                 |
|             | 9/28/2000   | 66             | 13                  | <5             | <5              | <10                | <10                  |                    |                 |
| (Duplicate) | 9/28/2000   | 51             | <5.0                | <5             | <5              | <10                | 11                   |                    |                 |
|             | 12/21/2000  | 46             | 10                  | <5             | NS              | NS                 | 20                   |                    |                 |
|             | 3/19/2001   | 37             | <5                  | 5.2            | <5              | <10                | <10                  |                    |                 |
|             | 6/28/2001   | 14             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/5/2003    | 5              | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 6/16/2003   |                | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 9/24/2003   | 5              | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 12/22/2003  | 1              | <1                  | <1             |                 |                    | <1                   |                    |                 |
|             | 3/22/2004   | <1             | <1                  | <1             |                 |                    | 3.7                  |                    |                 |
|             | 3/4/2005    | 15.2           | 1.71                | <1             | <1              | <1                 |                      | 3.69               |                 |
|             | 4/18/2006   | 28             | 5.75                | ND             |                 |                    | ND                   |                    |                 |
|             | 3/14/2007   | ND             | 0.00082             | ND             | ND              | ND                 | ND                   | ND                 | 376             |
|             | 4/14/2008   | 6              | ND                  | ND             | ND              | ND                 | ND                   |                    | 307             |
| MW-5        | 4/9/1999    | 53             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 7/15/1999   | 470            | 43                  | <5             | NS              | NS                 | 10                   |                    |                 |
|             | 9/22/1999   | 156            | 6                   | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/30/2000   | 50             | <5                  | 9.7            | <5              | <10                | ND                   |                    |                 |
|             | 6/20/2000   | 140            | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 9/28/2000   | 110            | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 12/21/2000  | 169            | 5                   | <5             | NS              | NS                 | 20                   |                    |                 |
|             | 3/19/2001   | 32             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 6/28/2001   | 96             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 9/24/2003   | 71             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 12/22/2003  | 17.9           | <5                  | <5             |                 |                    | <5                   |                    |                 |
| (Duplicate) | 12/22/2003  | 19.8           | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 3/22/2004   | 11.5           | <10                 | <10            |                 |                    | 22.2                 |                    |                 |
|             | 3/4/2005    | 25.5           | 6.78                | <1             | <1              | <1                 |                      | 1.52               |                 |
|             | 4/18/2006   | 5.11           | ND                  | ND             |                 |                    | ND                   |                    |                 |
|             | 3/14/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 415             |
|             | 4/14/2008   | 9              | ND                  | ND             | ND              | ND                 | ND                   |                    | 343             |

**Table 2. Historical BTEX Analytical Data**  
**Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID   | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|-----------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC      | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| MW-6      | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 9/22/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 3/30/2000   | <5             | <5                  | <5             | <5              | <10                | ND                   |                    |                 |
|           | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|           | 9/28/2000   | 11             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|           | 12/21/2000  | 14             | <5                  | <5             | NS              | NS                 | 10                   |                    |                 |
|           | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|           | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
| Duplicate | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
| Duplicate | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|           | 9/25/2002   | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|           | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|           | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|           | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|           | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|           | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 787             |
|           | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 437             |
|           |             |                |                     |                |                 |                    |                      |                    |                 |
| MW-7      | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 9/22/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|           | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|           | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|           | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|           | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|           | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|           | 3/4/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|           | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|           | 3/13/2007   |                |                     |                |                 |                    |                      |                    | 665             |
|           | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 599             |

**Table 2. Historical BTEX Analytical Data**  
**Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID     | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|-------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| <b>WQCC</b> | ----        | <b>10</b>      | <b>750</b>          | <b>750</b>     | ----            | -----              | <b>620</b>           | <b>30</b>          | <b>250</b>      |
| MW-8        | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 9/23/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/30/2000   | <5             | <5                  | <b>11</b>      | <5              | <10                | ND                   |                    |                 |
|             | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 9/28/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 12/21/2000  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|             | 9/25/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|             | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|             | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 6/16/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|             | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|             | 4/22/2005   | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|             | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|             | 3/14/2007   | 0.00634        | ND                  | ND             | ND              | ND                 | ND                   | 0.00789            | 295             |
|             | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 415             |
| MW-9        | 8/17/1999   | <b>20</b>      | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 9/23/1999   | <b>8</b>       | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/30/2000   | <5             | <5                  | 9.3            | <5              | <5                 | ND                   |                    |                 |
|             | 6/20/00*    | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 9/28/00*    | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 12/21/00*   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|             | 6/28/2001   | <5             | <b>28</b>           | <5             | NS              | NS                 | <10                  |                    |                 |
|             | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|             | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 6/16/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 12/22/2003  | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 3/22/2004   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|             | 3/3/2005    | <1             | <1                  | <1             | <2              | <1                 |                      | <1                 |                 |
|             | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|             | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 633             |
|             | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 372             |
| MW-10       | 8/17/1999   | <b>12100</b>   | <b>160</b>          | <b>1730</b>    | NS              | NS                 | 400                  |                    |                 |
|             | 9/22/1999   | <b>2900</b>    | <b>520</b>          | <b>800</b>     | NS              | NS                 | 600                  |                    |                 |

**Table 2. Historical BTEX Analytical Data**  
**Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID      | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|--------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC         | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| MW-11        | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/23/1999   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 3/30/2000   | <5             | <5                  | <5             | <5              | <10                | ND                   |                    |                 |
|              | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
| (Duplicate)  | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 9/28/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 12/21/2000  | <5             | <5                  | <5             | NS              | NS                 | 20                   |                    |                 |
|              | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
| (Duplicate)  | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|              | 9/25/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|              | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   |                |                     |                |                 |                    |                      |                    |                 |
|              | 9/24/2003   |                |                     |                |                 |                    |                      |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 292             |
|              | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 270             |
| MW-12 (PZ-2) | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/22/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/30/2000   | <5             | <5                  | <5             | <5              | <10                | ND                   |                    |                 |
|              | 6/20/2000   | 7.3            | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 9/28/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 12/21/2000  | <5             | <5                  | <5             | NS              | NS                 | 20                   |                    |                 |
|              | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 6/28/2001^  | NS             | NS                  | NS             | NS              | NS                 | NS                   |                    |                 |
|              | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|              | 9/25/2002   | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 4/22/2005   | <1             | <1                  | <1             |                 |                    | <1                   | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/14/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 289             |
|              | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 431             |

**Table 2. Historical BTEX Analytical Data**  
**Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID      | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|--------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC         | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| MW-13 (PZ-1) | 8/17/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/23/1999   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/30/2000   | <5             | 5                   | <5             | <5              | <10                | ND                   |                    |                 |
|              | 6/20/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 9/28/2000   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 12/21/2000  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 6/28/2002   | <200           | <200                | <200           | NS              | NS                 | <200                 |                    |                 |
|              | 9/25/2002   | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
| (Duplicate)  | 9/25/2002   | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
| (Duplicate)  | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/14/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 397             |
|              | 4/14/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 365             |
| MW-14        | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 836             |
|              | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 287             |
| MW-15        | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 258             |
|              | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 269             |
| MW-16        | 12/18/2002  | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 3/22/2004   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   | ND             | ND                  | ND             |                 |                    | ND                   |                    |                 |
|              | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 623             |
|              | 4/11/2008   | ND             | ND                  | ND             | ND              | ND                 | ND                   |                    | 779             |



**Table 2. Historical BTEX Analytical Data**  
**Former Bertha Barber Tank Battery, Lea County, New Mexico**

| WELL ID      | Sample Date | Benzene (ug/L) | Ethylbenzene (ug/L) | Toluene (ug/L) | o-Xylene (ug/L) | m&p-Xylenes (ug/L) | Total Xylenes (ug/L) | Naphthalene (ug/L) | Chloride (mg/L) |
|--------------|-------------|----------------|---------------------|----------------|-----------------|--------------------|----------------------|--------------------|-----------------|
| WQCC         | -----       | 10             | 750                 | 750            | -----           | -----              | 620                  | 30                 | 250             |
| Livestock WW | 3/19/2001   | <5             | <5                  | <5             | <5              | <10                | <10                  |                    |                 |
|              | 6/28/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 9/27/2001   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 12/26/2001  | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 3/22/2002   | <5             | <5                  | <5             | NS              | NS                 | <10                  |                    |                 |
|              | 6/28/2002   | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|              | 9/25/2002   | <1             | <1                  | <1             | NS              | NS                 | <1                   |                    |                 |
|              | 12/18/2002  | <5             | <5                  | <5             | NS              | NS                 | <5                   |                    |                 |
|              | 3/5/2003    | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/22/2004   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 3/3/2005    | <1             | <1                  | <1             | <1              | <1                 |                      | <1                 |                 |
|              | 4/18/2006   |                |                     |                |                 |                    |                      |                    |                 |
|              | 3/13/2007   | ND             | ND                  | ND             | ND              | ND                 | ND                   | ND                 | 1540            |
|              | 4/11/2008   | Dry            |                     |                |                 |                    |                      |                    |                 |
|              |             |                |                     |                |                 |                    |                      |                    |                 |
| Rinsate      | 3/5/2003    | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 6/16/2003   | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              | 9/24/2003   | <5             | <5                  | <5             |                 |                    | <5                   |                    |                 |
|              | 12/22/2003  | <1             | <1                  | <1             |                 |                    | <1                   |                    |                 |
|              |             |                |                     |                |                 |                    |                      |                    |                 |
|              |             |                |                     |                |                 |                    |                      |                    |                 |
|              |             |                |                     |                |                 |                    |                      |                    |                 |

**Footnotes:**

WQCC - New Mexico Water Quality Control Commission Ground Water Standards.

BTEX - Benzene, Toluene, Ethylbenzene and Total Xylenes.

ug/L - micrograms per liter.

NS - Constituent not speciated.

ND - Constituent was not detected during laboratory testing, and laboratory reporting limits are variable.

\* - Data was originally labeled as MW-7, but is actually MW-9.

MW-7 was not sampled in 2000 due to the presence of phase separate hydrocarbon (PSH).

\*\* - Question data because it appears to be more representative of the sample for MW-4 for the same event.

^ - Sample containers were all broken.

# FIGURES

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Figure 1: Groundwater Gradient Map

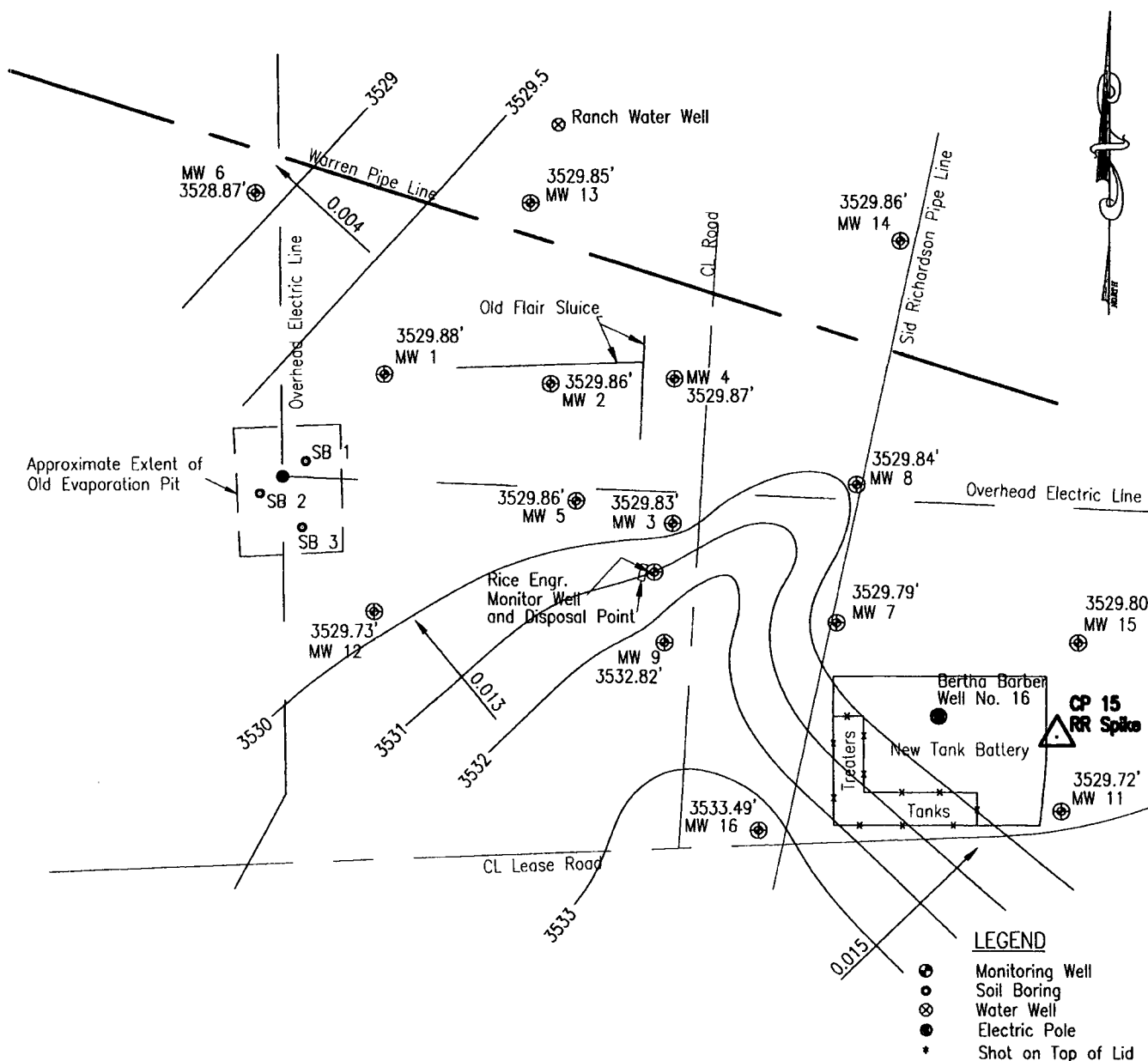
Figure 2: BTEX Concentration Map  
April 2008

Former Bertha Barber

**December 2008**

Marathon Oil Company  
Houston, Texas

Prepared by:  
BBC International, Inc.



Monitor well numbering was taken from plat map "MT749102.dwg" dated 7-07-2002 furnished by Marathon Oil Co. and may not reflect markings found on site.

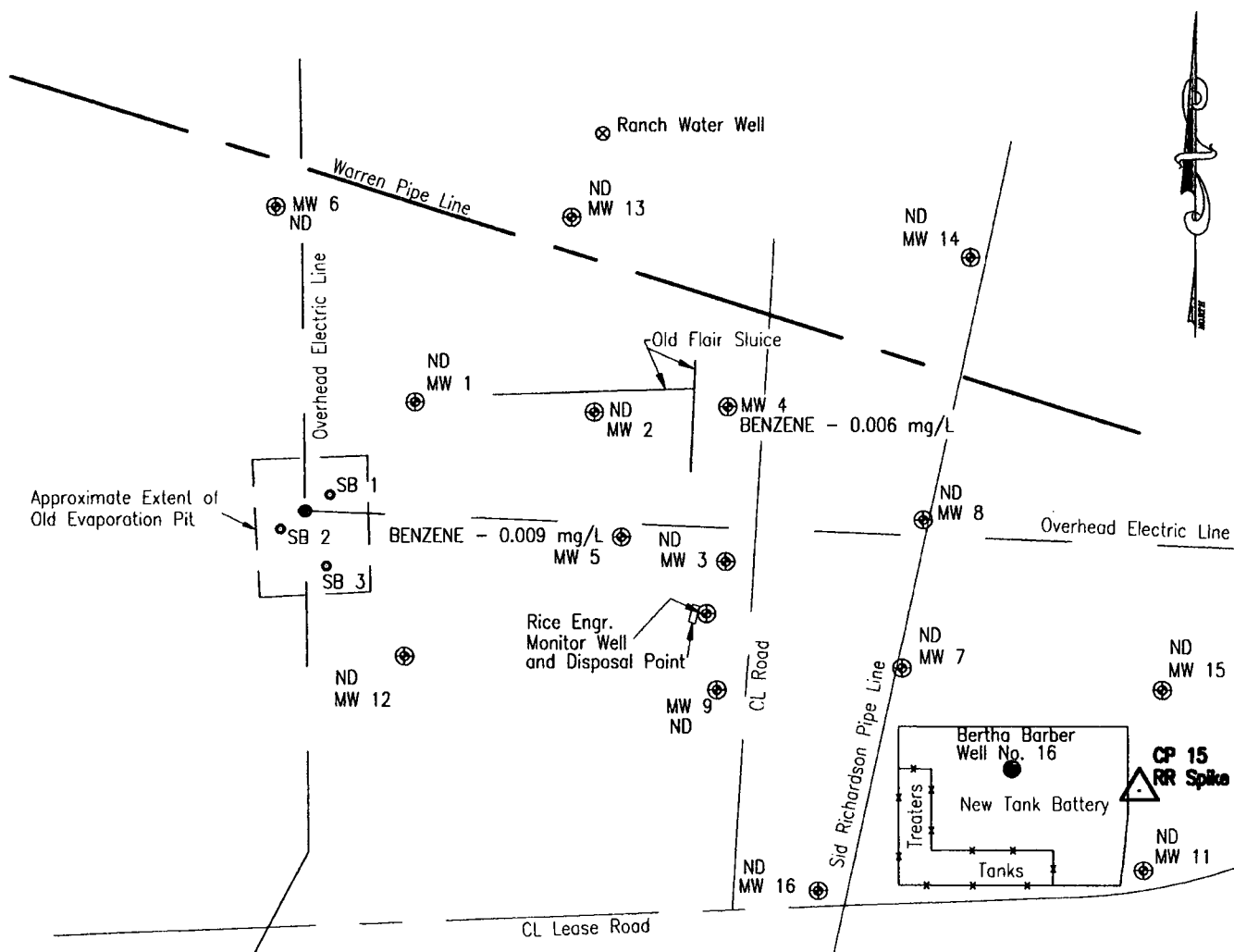
NOTE: BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

PROVIDING SURVEYING SERVICES  
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**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

## BBC INTERNATIONAL

**GRADIENT FIGURE 1**  
MONITORING WELLS AND SOIL BORING LOCATIONS IN  
FORMER BERTHA BARBER TANK BATTERY  
SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST,  
LEA COUNTY, NEW MEXICO

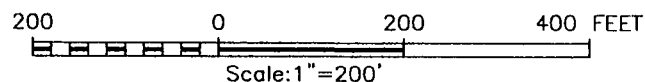
|                         |                              |
|-------------------------|------------------------------|
| Survey Date: 12/16/2002 | Sheet 1 of 1 Sheets          |
| W.O. Number: 08.13.0722 | Drawn By: L.A.               |
| Date: 5/5/08            | REL. W.O.: 06131104 08130722 |



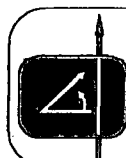
# LEGEND

- ⊗ Monitoring Well
- Soil Boring
- ⊗ Water Well
- Electric Pole
- \* Shot on Top of Lid

Monitor well numbering was taken from plat map "MT749102.dwg" dated 7-07-2002 furnished by Marathon Oil Co. and may not reflect markings found on site.



NOTE: BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.



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## BBC INTERNATIONAL

**BTEX FIGURE 2**  
MONITORING WELLS AND SOIL BORING LOCATIONS IN  
FORMER BERTHA BARBER TANK BATTERY  
SECTION 5, TOWNSHIP 20 SOUTH, RANGE 37 EAST,  
LEA COUNTY, NEW MEXICO

|                         |                              |
|-------------------------|------------------------------|
| Survey Date: 12/16/2002 | Sheet 1 of 1 Sheets          |
| W.O. Number: 08.13.0722 | Drawn By: L.A.               |
| Date: 5/7/08            | REL. W.O.: 06131104 08130722 |

# APPENDIX

---

**SPL**  
Laboratory Results  
April 2008

Former Bertha Barber

**December 2008**

Marathon Oil Company  
Houston, Texas

Prepared by:  
BBC International, Inc.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

**Marathon Petroleum Company, LLC**

**Certificate of Analysis Number:**

**08040865**

|                                                                                                                                                         |                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Report To:</u></b><br><br>BBC International<br>Cliff P. Brunson<br>1324 West Marland<br><br>Hobbs<br>NM<br>88240-<br>ph: (505) 397-6388      fax: | <b><u>Project Name:</u></b> Marathon - Bertha Barber<br><b><u>Site:</u></b> Monument, NM<br><b><u>Site Address:</u></b><br><br><b><u>PO Number:</u></b><br><b><u>State:</u></b> New Mexico<br><b><u>State Cert. No.:</u></b><br><b><u>Date Reported:</u></b> 4/25/2008 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

This Report Contains A Total Of 28 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

4/27/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Case Narrative for:  
**Marathon Petroleum Company, LLC**

Certificate of Analysis Number:

**08040865**

|                                                                                                                                                  |                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Report To:</b><br><br>BBC International<br>Cliff P. Brunson<br>1324 West Marland<br><br>Hobbs<br>NM<br>88240-<br>ph: (505) 397-6388      fax: | <b>Project Name:</b> Marathon - Bertha Barber<br><b>Site:</b> Monument, NM<br><b>Site Address:</b><br><br><b>PO Number:</b><br><b>State:</b> New Mexico<br><b>State Cert. No.:</b><br><b>Date Reported:</b> 4/25/2008 |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry " ).

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Joann Marroquin  
Senior Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.

08040865 Page 1

4/27/2008

Date



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

**Marathon Petroleum Company, LLC**

**Certificate of Analysis Number:**

**08040865**

**Report To:** BBC International  
Cliff P. Brunson  
1324 West Marland

Hobbs  
NM

88240-

ph: (505) 397-6388

fax: (505) 397-0397

**Fax To:**

**Project Name:** Marathon - Bertha Barber

**Site:** Monument, NM

**Site Address:**

**PO Number:**

**State:** New Mexico

**State Cert. No.:**

**Date Reported:** 4/25/2008

| Client Sample ID | Lab Sample ID | Matrix | Date Collected        | Date Received         | COC ID | HOLD                     |
|------------------|---------------|--------|-----------------------|-----------------------|--------|--------------------------|
| MW 11            | 08040865-01   | Water  | 4/11/2008 10:15:00 AM | 4/15/2008 10:00:00 AM | 278161 | <input type="checkbox"/> |
| MW 15            | 08040865-02   | Water  | 4/11/2008 11:10:00 AM | 4/15/2008 10:00:00 AM | 278161 | <input type="checkbox"/> |
| MW 14            | 08040865-03   | Water  | 4/11/2008 1:58:00 PM  | 4/15/2008 10:00:00 AM | 278161 | <input type="checkbox"/> |
| MW 6             | 08040865-04   | Water  | 4/11/2008 2:35:00 PM  | 4/15/2008 10:00:00 AM | 278152 | <input type="checkbox"/> |
| MW 9             | 08040865-05   | Water  | 4/11/2008 3:15:00 PM  | 4/15/2008 10:00:00 AM | 278152 | <input type="checkbox"/> |
| MW 3             | 08040865-06   | Water  | 4/11/2008 4:02:00 PM  | 4/15/2008 10:00:00 AM | 278152 | <input type="checkbox"/> |
| MW 16            | 08040865-07   | Water  | 4/11/2008 4:35:00 PM  | 4/15/2008 10:00:00 AM | 278153 | <input type="checkbox"/> |
| MW 7             | 08040865-08   | Water  | 4/11/2008 5:05:00 PM  | 4/15/2008 10:00:00 AM | 278153 | <input type="checkbox"/> |
| MW 8             | 08040865-09   | Water  | 4/11/2008 5:36:00 PM  | 4/15/2008 10:00:00 AM | 278153 | <input type="checkbox"/> |
| MW 12            | 08040865-10   | Water  | 4/11/2008 6:03:00 PM  | 4/15/2008 10:00:00 AM | 278154 | <input type="checkbox"/> |
| MW 13            | 08040865-11   | Water  | 4/14/2008 9:22:00 AM  | 4/15/2008 10:00:00 AM | 278154 | <input type="checkbox"/> |
| MW 4             | 08040865-12   | Water  | 4/14/2008 10:30:00 AM | 4/15/2008 10:00:00 AM | 278154 | <input type="checkbox"/> |
| MW 5             | 08040865-13   | Water  | 4/14/2008 11:33:00 AM | 4/15/2008 10:00:00 AM | 278154 | <input type="checkbox"/> |

*Joann Marroquin*

Joann Marroquin  
Senior Project Manager

4/27/2008

Date

Richard R. Reed  
Laboratory Director

Ted Yen  
Quality Assurance Officer





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 11

Collected: 04/11/2008 10:15

SPL Sample ID: 08040865-01

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 270    |      | 5         | 5           | 04/21/08 11:15 | A_E                | 4389427 |

|                                      |        |  |      |            |                |                    |         |
|--------------------------------------|--------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |        |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.0622 |  | 0.02 | 1          | 04/18/08 21:55 | EG                 | 4386452 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.113  |  | 0.005 | 1          | 04/17/08 20:04 | AL_H               | 4384900 |
| Manganese                           | 0.0705 |  | 0.005 | 1          | 04/17/08 20:04 | AL_H               | 4384900 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1110 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384351 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 16:23 | E_G                | 4386255 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 16:23 | E_G                | 4386255 |

**Qualifiers:**  
ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 15

Collected: 04/11/2008 11:10

SPL Sample ID: 08040865-02

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 269    |      | 5         | 5           | 04/21/08 11:15 | A_E                | 4389430 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.116 |  | 0.02 | 1          | 04/18/08 22:30 | EG                 | 4386460 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.223  |  | 0.005 | 1          | 04/17/08 20:44 | AL_H               | 4384906 |
| Manganese                           | 0.0616 |  | 0.005 | 1          | 04/17/08 20:44 | AL_H               | 4384906 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1100 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384352 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Surr: 4-Bromofluorobenzene               | 94.0 | % | 70-130 | 1          | 04/18/08 16:47 | E_G                | 4386256 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 16:47 | E_G                | 4386256 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 14

Collected: 04/11/2008 13:58

SPL Sample ID: 08040865-03

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 287    |      | 5         | 5           | 04/21/08 11:15 | A_E                | 4389431 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.129 |  | 0.02 | 1          | 04/18/08 22:34 | EG                 | 4386461 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.202  |  | 0.005 | 1          | 04/17/08 20:50 | AL_H               | 4384907 |
| Manganese                           | 0.0299 |  | 0.005 | 1          | 04/17/08 20:50 | AL_H               | 4384907 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1210 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384353 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 18:25 | E_G                | 4386259 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 18:25 | E_G                | 4386259 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 6

Collected: 04/11/2008 14:35

SPL Sample ID: 08040865-04

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 437    |      | 20        | 20          | 04/21/08 11:24 | A_E                | 4389432 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.167 |  | 0.02 | 1          | 04/18/08 22:39 | EG                 | 4386462 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.113  |  | 0.005 | 1          | 04/19/08 3:57  | AL_H               | 4387162 |
| Manganese                           | 0.0391 |  | 0.005 | 1          | 04/17/08 21:10 | AL_H               | 4384910 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |     |            |                |                    |         |
|-------------------------------------------------|------|--|-----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |     | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1670 |  | 100 | 10         | 04/16/08 16:30 | KRD                | 4384354 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 17:36 | E_G                | 4386257 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 17:36 | E_G                | 4386257 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 9

Collected: 04/11/2008 15:15 SPL Sample ID: 08040865-05

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 372    |      | 20        | 20          | 04/21/08 11:24 | A_E                | 4389433 |

|                                      |        |  |      |            |                |                    |         |
|--------------------------------------|--------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |        |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.0382 |  | 0.02 | 1          | 04/18/08 22:43 | EG                 | 4386463 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 5.45   |  | 0.005 | 1          | 04/17/08 21:17 | AL_H               | 4384911 |
| Manganese                           | 0.0267 |  | 0.005 | 1          | 04/17/08 21:17 | AL_H               | 4384911 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |     |            |                |                    |         |
|-------------------------------------------------|------|--|-----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |     | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1480 |  | 100 | 10         | 04/16/08 16:30 | KRD                | 4384355 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Surr: 1,2-Dichloroethane-d4              | 98.0 | % | 62-130 | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 18:01 | E_G                | 4386258 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 18:01 | E_G                | 4386258 |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
\* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 3

Collected: 04/11/2008 16:02

SPL Sample ID: 08040865-06

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 358    |      | 20        | 20          | 04/21/08 11:24 | A_E                | 4389434 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.112 |  | 0.02 | 1          | 04/18/08 22:47 | EG                 | 4386464 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 4.73   |  | 0.005 | 1          | 04/17/08 21:24 | AL_H               | 4384912 |
| Manganese                           | 0.0264 |  | 0.005 | 1          | 04/17/08 21:24 | AL_H               | 4384912 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1210 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384356 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Surr: 1,2-Dichloroethane-d4              | 98.0 | % | 62-130 | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 18:50 | E_G                | 4386260 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 18:50 | E_G                | 4386260 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 16

Collected: 04/11/2008 16:35 SPL Sample ID: 08040865-07

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 779    |      | 20        | 20          | 04/21/08 11:24 | A_E                | 4389435 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.699 |  | 0.02 | 1          | 04/18/08 22:52 | EG                 | 4386465 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 7.4    |  | 0.005 | 1          | 04/17/08 21:30 | AL_H               | 4384913 |
| Manganese                           | 0.0622 |  | 0.005 | 1          | 04/17/08 21:30 | AL_H               | 4384913 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 2000 |  | 20 | 2          | 04/17/08 17:00 | KRD                | 4385290 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 19:15 | E_G                | 4386261 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 19:15 | E_G                | 4386261 |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 7

Collected: 04/11/2008 17:05

SPL Sample ID: 08040865-08

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 599    |      | 20        | 20          | 04/21/08 11:24 | A_E                | 4389436 |

|                                      |      |  |      |            |                |                    |         |
|--------------------------------------|------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |      |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 2.91 |  | 0.02 | 1          | 04/18/08 22:56 | EG                 | 4386466 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |       |  |       |            |                |                    |         |
|-------------------------------------|-------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |       |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.189 |  | 0.005 | 1          | 04/19/08 4:03  | AL_H               | 4387163 |
| Manganese                           | 0.106 |  | 0.005 | 1          | 04/17/08 21:37 | AL_H               | 4384914 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1980 |  | 20 | 2          | 04/17/08 17:00 | KRD                | 4385292 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 19:39 | E_G                | 4386262 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 19:39 | E_G                | 4386262 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 8

Collected: 04/11/2008 17:36

SPL Sample ID: 08040865-09

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 415    |      | 20        | 20          | 04/21/08 12:03 | A_E                | 4389439 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.221 |  | 0.02 | 1          | 04/18/08 23:01 | EG                 | 4386467 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |       |  |       |            |                |                    |         |
|-------------------------------------|-------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |       |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.16  |  | 0.005 | 1          | 04/19/08 4:10  | AL_H               | 4387164 |
| Manganese                           | 0.044 |  | 0.005 | 1          | 04/17/08 21:43 | AL_H               | 4384915 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1490 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384358 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 20:04 | E_G                | 4386263 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 20:04 | E_G                | 4386263 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 12

Collected: 04/11/2008 18:03

SPL Sample ID: 08040865-10

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 431    |      | 20        | 20          | 04/21/08 12:03 | A_E                | 4389440 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.758 |  | 0.02 | 1          | 04/18/08 23:14 | EG                 | 4386470 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |       |  |       |            |                |                    |         |
|-------------------------------------|-------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |       |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.304 |  | 0.005 | 1          | 04/19/08 4:16  | AL_H               | 4387165 |
| Manganese                           | 0.059 |  | 0.005 | 1          | 04/17/08 21:50 | AL_H               | 4384916 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1410 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384359 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 20:29 | E_G                | 4386264 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 20:29 | E_G                | 4386264 |

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 13

Collected: 04/14/2008 9:22

SPL Sample ID: 08040865-11

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 365    |      | 20        | 20          | 04/21/08 12:03 | A_E                | 4389441 |

|                                      |       |  |      |            |                |                    |         |
|--------------------------------------|-------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |       |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.136 |  | 0.02 | 1          | 04/18/08 23:18 | EG                 | 4386471 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 0.726  |  | 0.005 | 1          | 04/19/08 4:23  | AL_H               | 4387166 |
| Manganese                           | 0.0425 |  | 0.005 | 1          | 04/17/08 21:57 | AL_H               | 4384917 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1250 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384360 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 20:53 | E_G                | 4386265 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 20:53 | E_G                | 4386265 |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 4 Collected: 04/14/2008 10:30 SPL Sample ID: 08040865-12

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 307    |      | 20        | 20          | 04/21/08 12:04 | A_E                | 4389445 |

|                                      |        |  |      |            |                |                    |         |
|--------------------------------------|--------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |        |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.0781 |  | 0.02 | 1          | 04/18/08 23:23 | EG                 | 4386472 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 22.4   |  | 0.005 | 1          | 04/17/08 22:03 | AL_H               | 4384918 |
| Manganese                           | 0.0205 |  | 0.005 | 1          | 04/17/08 22:03 | AL_H               | 4384918 |

| Prep Method | Prep Date        | Prep Initials | Prep Factor |
|-------------|------------------|---------------|-------------|
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1170 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384362 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | 6    |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Surr: 1,2-Dichloroethane-d4              | 100  | % | 62-130 | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Surr: 4-Bromofluorobenzene               | 98.0 | % | 70-130 | 1          | 04/18/08 21:18 | E_G                | 4386266 |
| Surr: Toluene-d8                         | 96.0 | % | 74-122 | 1          | 04/18/08 21:18 | E_G                | 4386266 |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
\* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Client Sample ID: MW 5 Collected: 04/14/2008 11:33 SPL Sample ID: 08040865-13

Site: Monument, NM

| Analyses/Method        | Result | QUAL | Rep.Limit | Dil. Factor | Date Analyzed  | Analyst            | Seq. #  |
|------------------------|--------|------|-----------|-------------|----------------|--------------------|---------|
| <b>CHLORIDE, TOTAL</b> |        |      |           | <b>MCL</b>  | <b>E325.2</b>  | <b>Units: mg/L</b> |         |
| Chloride               | 343    |      | 20        | 20          | 04/21/08 12:03 | A_E                | 4389442 |

|                                      |        |  |      |            |                |                    |         |
|--------------------------------------|--------|--|------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6010B, TOTAL</b> |        |  |      | <b>MCL</b> | <b>SW6010B</b> | <b>Units: mg/L</b> |         |
| Iron                                 | 0.0569 |  | 0.02 | 1          | 04/18/08 23:27 | EG                 | 4386473 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                     |        |  |       |            |                |                    |         |
|-------------------------------------|--------|--|-------|------------|----------------|--------------------|---------|
| <b>METALS BY METHOD 6020, TOTAL</b> |        |  |       | <b>MCL</b> | <b>SW6020A</b> | <b>Units: mg/L</b> |         |
| Barium                              | 16.5   |  | 0.005 | 1          | 04/17/08 22:10 | AL_H               | 4384919 |
| Manganese                           | 0.0284 |  | 0.005 | 1          | 04/17/08 22:10 | AL_H               | 4384919 |

|             |                  |               |             |
|-------------|------------------|---------------|-------------|
| Prep Method | Prep Date        | Prep Initials | Prep Factor |
| SW3010A     | 04/16/2008 11:30 | DDW           | 1.00        |

|                                                 |      |  |    |            |                |                    |         |
|-------------------------------------------------|------|--|----|------------|----------------|--------------------|---------|
| <b>TOTAL DISSOLVED SOLIDS</b>                   |      |  |    | <b>MCL</b> | <b>E160.1</b>  | <b>Units: mg/L</b> |         |
| Total Dissolved Solids<br>(Residue, Filterable) | 1210 |  | 10 | 1          | 04/16/08 16:30 | KRD                | 4384363 |

|                                          |      |   |        |            |                |                    |         |
|------------------------------------------|------|---|--------|------------|----------------|--------------------|---------|
| <b>VOLATILE ORGANICS BY METHOD 8260B</b> |      |   |        | <b>MCL</b> | <b>SW8260B</b> | <b>Units: ug/L</b> |         |
| Benzene                                  | 9    |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Ethylbenzene                             | ND   |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Toluene                                  | ND   |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| m,p-Xylene                               | ND   |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| o-Xylene                                 | ND   |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Xylenes, Total                           | ND   |   | 5      | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Surr: 1,2-Dichloroethane-d4              | 98.0 | % | 62-130 | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Surr: 4-Bromofluorobenzene               | 96.0 | % | 70-130 | 1          | 04/18/08 21:42 | E_G                | 4386267 |
| Surr: Toluene-d8                         | 98.0 | % | 74-122 | 1          | 04/18/08 21:42 | E_G                | 4386267 |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
B/V - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
\* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
J - Estimated Value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
TNTC - Too numerous to count

## *Quality Control Documentation*



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC

Marathon - Bertha Barber

Analysis: Metals by Method 6010B, Total  
Method: SW6010B

WorkOrder: 08040865  
Lab Batch ID: 77721

### Method Blank

RunID: TJA\_080418A-4386450 Units: mg/L  
Analysis Date: 04/18/2008 21:46 Analyst: EG  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte | Result | Rep Limit |
|---------|--------|-----------|
| Iron    | ND     | 0.02      |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-01C  | MW 11            |
| 08040865-02C  | MW 15            |
| 08040865-03C  | MW 14            |
| 08040865-04C  | MW 6             |
| 08040865-05C  | MW 9             |
| 08040865-06C  | MW 3             |
| 08040865-07C  | MW 16            |
| 08040865-08C  | MW 7             |
| 08040865-09C  | MW 8             |
| 08040865-10C  | MW 12            |
| 08040865-11C  | MW 13            |
| 08040865-12C  | MW 4             |
| 08040865-13C  | MW 5             |

### Laboratory Control Sample (LCS)

RunID: TJA\_080418A-4386451 Units: mg/L  
Analysis Date: 04/18/2008 21:50 Analyst: EG  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte | Spike Added | Result | Percent Recovery | Lower Limit | Upper Limit |
|---------|-------------|--------|------------------|-------------|-------------|
| Iron    | 1.000       | 1.087  | 108.7            | 80          | 120         |

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08040865-01  
RunID: TJA\_080418A-4386453 Units: mg/L  
Analysis Date: 04/18/2008 21:59 Analyst: EG  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD   | RPD Limit | Low Limit | High Limit |
|---------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|-------|-----------|-----------|------------|
| Iron    | 0.06217       | 1              | 1.006     | 94.42         | 1               | 1.051      | 98.89          | 4.341 | 20        | 75        | 125        |

Qualifiers: ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC Marathon - Bertha Barber

Analysis: Metals by Method 6020, Total  
Method: SW6020A

WorkOrder: 08040865  
Lab Batch ID: 77721-I

### Method Blank

RunID: ICPMS2\_080417A-4384898 Units: mg/L  
Analysis Date: 04/17/2008 19:51 Analyst: AL\_H  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte   | Result | Rep Limit |
|-----------|--------|-----------|
| Barium    | ND     | 0.005     |
| Manganese | ND     | 0.005     |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-01C  | MW 11            |
| 08040865-02C  | MW 15            |
| 08040865-03C  | MW 14            |
| 08040865-04C  | MW 6             |
| 08040865-05C  | MW 9             |
| 08040865-06C  | MW 3             |
| 08040865-07C  | MW 16            |
| 08040865-08C  | MW 7             |
| 08040865-09C  | MW 8             |
| 08040865-10C  | MW 12            |
| 08040865-11C  | MW 13            |
| 08040865-12C  | MW 4             |
| 08040865-13C  | MW 5             |

### Laboratory Control Sample (LCS)

RunID: ICPMS2\_080417A-4384899 Units: mg/L  
Analysis Date: 04/17/2008 19:57 Analyst: AL\_H  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte   | Spike Added | Result  | Percent Recovery | Lower Limit | Upper Limit |
|-----------|-------------|---------|------------------|-------------|-------------|
| Barium    | 0.1000      | 0.09141 | 91.41            | 80          | 120         |
| Manganese | 0.1000      | 0.08727 | 87.27            | 80          | 120         |

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08040865-01  
RunID: ICPMS2\_080417A-4384901 Units: mg/L  
Analysis Date: 04/17/2008 20:11 Analyst: AL\_H  
Preparation Date: 04/16/2008 11:30 Prep By: DD Method: SW3010A

| Analyte   | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD    | RPD Limit | Low Limit | High Limit |
|-----------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|--------|-----------|-----------|------------|
| Barium    | 0.1135        | 0.1            | 0.2188    | 105.3         | 0.1             | 0.2207     | 107.2          | 0.8646 | 20        | 75        | 125        |
| Manganese | 0.07048       | 0.1            | 0.1728    | 102.3         | 0.1             | 0.1743     | 103.8          | 0.8643 | 20        | 75        | 125        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

Marathon Petroleum Company, LLC

Marathon - Bertha Barber

Analysis: Metals by Method 6020, Total  
Method: SW6020A

WorkOrder: 08040865  
Lab Batch ID: 77721-I

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

\* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC

Marathon - Bertha Barber

Analysis: Volatile Organics by Method 8260B  
Method: SW8260B

WorkOrder: 08040865  
Lab Batch ID: R234515

### Method Blank

RunID: L\_080418A-4386246 Units: ug/L  
Analysis Date: 04/18/2008 11:51 Analyst: E\_G  
Preparation Date: 04/18/2008 11:51 Prep By: Method:

| Analyte                     | Result | Rep Limit |
|-----------------------------|--------|-----------|
| Benzene                     | ND     | 5.0       |
| Ethylbenzene                | ND     | 5.0       |
| Toluene                     | ND     | 5.0       |
| m,p-Xylene                  | ND     | 5.0       |
| o-Xylene                    | ND     | 5.0       |
| Xylenes, Total              | ND     | 5.0       |
| Surr: 1,2-Dichloroethane-d4 | 100.0  | 62-130    |
| Surr: 4-Bromofluorobenzene  | 96.0   | 70-130    |
| Surr: Toluene-d8            | 98.0   | 74-122    |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-01A  | MW 11            |
| 08040865-02A  | MW 15            |
| 08040865-03A  | MW 14            |
| 08040865-04A  | MW 6             |
| 08040865-05A  | MW 9             |
| 08040865-06A  | MW 3             |
| 08040865-07A  | MW 16            |
| 08040865-08A  | MW 7             |
| 08040865-09A  | MW 8             |
| 08040865-10A  | MW 12            |
| 08040865-11A  | MW 13            |
| 08040865-12A  | MW 4             |
| 08040865-13A  | MW 5             |

### Laboratory Control Sample (LCS)

RunID: L\_080418A-4386245 Units: ug/L  
Analysis Date: 04/18/2008 11:13 Analyst: E\_G  
Preparation Date: 04/18/2008 11:13 Prep By: Method:

| Analyte                     | Spike Added | Result | Percent Recovery | Lower Limit | Upper Limit |
|-----------------------------|-------------|--------|------------------|-------------|-------------|
| Benzene                     | 20.0        | 18.0   | 90.0             | 76          | 126         |
| Ethylbenzene                | 20.0        | 18.0   | 90.0             | 67          | 122         |
| Toluene                     | 20.0        | 18.0   | 90.0             | 70          | 131         |
| m,p-Xylene                  | 40.0        | 36.0   | 90.0             | 72          | 150         |
| o-Xylene                    | 20.0        | 18.0   | 90.0             | 78          | 141         |
| Xylenes, Total              | 60          | 54     | 90               | 72          | 150         |
| Surr: 1,2-Dichloroethane-d4 | 50.0        | 49     | 98.0             | 62          | 130         |
| Surr: 4-Bromofluorobenzene  | 50.0        | 50     | 100              | 70          | 130         |
| Surr: Toluene-d8            | 50.0        | 49     | 98.0             | 74          | 122         |

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08040934-01  
RunID: L\_080418A-4386253 Units: ug/L  
Analysis Date: 04/18/2008 15:09 Analyst: E\_G

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC

Marathon - Bertha Barber

Analysis: Volatile Organics by Method 8260B  
Method: SW8260B

WorkOrder: 08040865  
Lab Batch ID: R234515

| Analyte                     | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD  | RPD Limit | Low Limit | High Limit |
|-----------------------------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|------|-----------|-----------|------------|
| Benzene                     | ND            | 20             | 17.0      | 85.0          | 20              | 17.0       | 85.0           | 0    | 22        | 76        | 127        |
| Ethylbenzene                | ND            | 20             | 16.0      | 80.0          | 20              | 16.0       | 80.0           | 0    | 20        | 35        | 175        |
| Toluene                     | ND            | 20             | 16.0      | 80.0          | 20              | 16.0       | 80.0           | 0    | 24        | 70        | 131        |
| m,p-Xylene                  | ND            | 40             | 34.0      | 85.0          | 40              | 33.0       | 82.5           | 2.99 | 20        | 35        | 175        |
| o-Xylene                    | ND            | 20             | 17.0      | 85.0          | 20              | 16.0       | 80.0           | 6.06 | 20        | 35        | 175        |
| Xylenes, Total              | ND            | 60             | 51        | 85            | 60              | 49         | 82             | 4.0  | 20        | 35        | 175        |
| Surr: 1,2-Dichloroethane-d4 | ND            | 50             | 50        | 100           | 50              | 50.0       | 100            | 0    | 30        | 62        | 130        |
| Surr: 4-Bromofluorobenzene  | ND            | 50             | 50        | 100           | 50              | 50.0       | 100            | 0    | 30        | 70        | 130        |
| Surr: Toluene-d8            | ND            | 50             | 49        | 98.0          | 50              | 48.0       | 96.0           | 2.06 | 30        | 74        | 122        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TN/C - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC Marathon - Bertha Barber

Analysis: Total Dissolved Solids  
Method: E160.1

WorkOrder: 08040865  
Lab Batch ID: R234375

### Method Blank

RunID: WET\_080416ZF-4384345 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                   | Result | Rep Limit |
|-------------------------------------------|--------|-----------|
| Total Dissolved Solids (Residue,Filterabl | ND     | 10        |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-09B  | MW 8             |
| 08040865-10B  | MW 12            |
| 08040865-11B  | MW 13            |
| 08040865-12B  | MW 4             |
| 08040865-13B  | MW 5             |

### Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: WET\_080416ZF-4384347 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                   | LCS Spike Added | LCS Result | LCS Percent Recovery | LCSD Spike Added | LCSD Result | LCSD Percent Recovery | RPD | RPD Limit | Lower Limit | Upper Limit |
|-------------------------------------------|-----------------|------------|----------------------|------------------|-------------|-----------------------|-----|-----------|-------------|-------------|
| Total Dissolved Solids (Residue,Filterabl | 200.0           | 202.0      | 101.0                | 200.0            | 198.0       | 99.00                 | 2.0 | 10        | 95          | 107         |

### Sample Duplicate

Original Sample: 08040865-11  
RunID: WET\_080416ZF-4384360 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                   | Sample Result | DUP Result | RPD    | RPD Limit |
|-------------------------------------------|---------------|------------|--------|-----------|
| Total Dissolved Solids (Residue,Filterabl | 1250          | 1254       | 0.0798 | 20        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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4/27/2008 8:57:51 PM



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC Marathon - Bertha Barber

Analysis: Total Dissolved Solids  
Method: E160.1

WorkOrder: 08040865  
Lab Batch ID: R234375A

### Method Blank

RunID: WET\_080416ZF-4384345 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                     | Result | Rep Limit |
|---------------------------------------------|--------|-----------|
| Total Dissolved Solids (Residue,Filterable) | ND     | 10        |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-01B  | MW 11            |
| 08040865-02B  | MW 15            |
| 08040865-03B  | MW 14            |
| 08040865-04B  | MW 6             |
| 08040865-05B  | MW 9             |
| 08040865-06B  | MW 3             |

### Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: WET\_080416ZF-4384347 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                   | LCS Spike Added | LCS Result | LCS Percent Recovery | LCSD Spike Added | LCSD Result | LCSD Percent Recovery | RPD | RPD Limit | Lower Limit | Upper Limit |
|-------------------------------------------|-----------------|------------|----------------------|------------------|-------------|-----------------------|-----|-----------|-------------|-------------|
| Total Dissolved Solids (Residue,Filterabl | 200.0           | 202.0      | 101.0                | 200.0            | 198.0       | 99.00                 | 2.0 | 10        | 95          | 107         |

### Sample Duplicate

Original Sample: 08040349-08  
RunID: WET\_080416ZF-4384349 Units: mg/L  
Analysis Date: 04/16/2008 16:30 Analyst: KRD

| Analyte                                   | Sample Result | DUP Result | RPD   | RPD Limit |
|-------------------------------------------|---------------|------------|-------|-----------|
| Total Dissolved Solids (Residue,Filterabl | 3290          | 3310       | 0.606 | 20        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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4/27/2008 8:57:52 PM



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC

Marathon - Bertha Barber

Analysis: Total Dissolved Solids  
Method: E160.1

WorkOrder: 08040865  
Lab Batch ID: R234437

### Method Blank

RunID: WET\_080417U-4385286 Units: mg/L  
Analysis Date: 04/17/2008 17:00 Analyst: KRD

### Samples in Analytical Batch:

Lab Sample ID Client Sample ID  
08040865-07B MW 16  
08040865-08B MW 7

| Analyte                                     | Result | Rep Limit |
|---------------------------------------------|--------|-----------|
| Total Dissolved Solids (Residue,Filterable) | ND     | 10        |

### Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: WET\_080417U-4385288 Units: mg/L  
Analysis Date: 04/17/2008 17:00 Analyst: KRD

| Analyte                                   | LCS<br>Spike<br>Added | LCS<br>Result | LCS<br>Percent<br>Recovery | LCSD<br>Spike<br>Added | LCSD<br>Result | LCSD<br>Percent<br>Recovery | RPD | RPD<br>Limit | Lower<br>Limit | Upper<br>Limit |
|-------------------------------------------|-----------------------|---------------|----------------------------|------------------------|----------------|-----------------------------|-----|--------------|----------------|----------------|
| Total Dissolved Solids (Residue,Filterabl | 200.0                 | 199.0         | 99.50                      | 200.0                  | 201.0          | 100.5                       | 1.0 | 10           | 95             | 107            |

### Sample Duplicate

Original Sample: 08040865-07  
RunID: WET\_080417U-4385290 Units: mg/L  
Analysis Date: 04/17/2008 17:00 Analyst: KRD

| Analyte                                   | Sample<br>Result | DUP<br>Result | RPD   | RPD<br>Limit |
|-------------------------------------------|------------------|---------------|-------|--------------|
| Total Dissolved Solids (Residue,Filterabl | 2000             | 1996          | 0.100 | 20           |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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4/27/2008 8:57:52 PM



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC Marathon - Bertha Barber

Analysis: Chloride, Total  
Method: E325.2

WorkOrder: 08040865  
Lab Batch ID: R234687

### Method Blank

RunID: KONELAB\_080421A-4389423 Units: mg/L  
Analysis Date: 04/21/2008 10:46 Analyst: A\_E

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-11B  | MW 13            |
| 08040865-12B  | MW 4             |
| 08040865-13B  | MW 5             |

| Analyte  | Result | Rep Limit |
|----------|--------|-----------|
| Chloride | ND     | 1.0       |

### Laboratory Control Sample (LCS)

RunID: KONELAB\_080421A-43894 Units: mg/L  
Analysis Date: 04/21/2008 10:46 Analyst: A\_E

| Analyte  | Spike Added | Result | Percent Recovery | Lower Limit | Upper Limit |
|----------|-------------|--------|------------------|-------------|-------------|
| Chloride | 50.00       | 47.52  | 95.03            | 80          | 120         |

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08040865-13  
RunID: KONELAB\_080421A-43894 Units: mg/L  
Analysis Date: 04/21/2008 12:03 Analyst: A\_E

| Analyte  | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD | RPD Limit | Low Limit | High Limit |
|----------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|-----|-----------|-----------|------------|
| Chloride | 343.2         | 50             | 377.1     | N/C           | 50              | 370.7      | N/C            | N/C | 20        | 76        | 131        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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4/27/2008 8:57:52 PM



# Quality Control Report

HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

## Marathon Petroleum Company, LLC Marathon - Bertha Barber

Analysis: Chloride, Total  
Method: E325.2

WorkOrder: 08040865  
Lab Batch ID: R234687A

### Method Blank

RunID: KONELAB\_080421A-4389423 Units: mg/L  
Analysis Date: 04/21/2008 10:46 Analyst: A\_E

| Analyte  | Result | Rep Limit |
|----------|--------|-----------|
| Chloride | ND     | 1.0       |

### Samples in Analytical Batch:

| Lab Sample ID | Client Sample ID |
|---------------|------------------|
| 08040865-01B  | MW 11            |
| 08040865-02B  | MW 15            |
| 08040865-03B  | MW 14            |
| 08040865-04B  | MW 6             |
| 08040865-05B  | MW 9             |
| 08040865-06B  | MW 3             |
| 08040865-07B  | MW 16            |
| 08040865-08B  | MW 7             |
| 08040865-09B  | MW 8             |
| 08040865-10B  | MW 12            |

### Laboratory Control Sample (LCS)

RunID: KONELAB\_080421A-43894 Units: mg/L  
Analysis Date: 04/21/2008 10:46 Analyst: A\_E

| Analyte  | Spike Added | Result | Percent Recovery | Lower Limit | Upper Limit |
|----------|-------------|--------|------------------|-------------|-------------|
| Chloride | 50.00       | 47.52  | 95.03            | 80          | 120         |

### Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08040865-01  
RunID: KONELAB\_080421A-43894 Units: mg/L  
Analysis Date: 04/21/2008 11:15 Analyst: A\_E

| Analyte  | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD | RPD Limit | Low Limit | High Limit |
|----------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|-----|-----------|-----------|------------|
| Chloride | 270.2         | 50             | 304.0     | N/C           | 50              | 304.1      | N/C            | N/C | 20        | 76        | 131        |

**Qualifiers:** ND/U - Not Detected at the Reporting Limit  
B/V - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
E - Estimated Value exceeds calibration curve  
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.  
TNTC - Too numerous to count

MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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*Sample Receipt Checklist  
And  
Chain of Custody*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TX 77054  
(713) 660-0901

### Sample Receipt Checklist

Workorder: 08040865

Received By: AE

Date and Time Received: 4/15/2008 10:00:00 AM

Carrier name: Fedex-Standard Overnight

Temperature: 3.0°C

Chilled by: Water Ice

- |                                                              |                                         |                             |                                                 |
|--------------------------------------------------------------|-----------------------------------------|-----------------------------|-------------------------------------------------|
| 1. Shipping container/cooler in good condition?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| 2. Custody seals intact on shipping container/cooler?        | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles?                   | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present?                                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 5. Chain of custody signed when relinquished and received?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 6. Chain of custody agrees with sample labels?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 7. Samples in proper container/bottle?                       | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 8. Sample containers intact?                                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 9. Sufficient sample volume for indicated test?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 10. All samples received within holding time?                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 11. Container/Temp Blank temperature in compliance?          | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |                                                 |
| 12. Water - VOA vials have zero headspace?                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input type="checkbox"/>  |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |

\*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance  
Issues:

Client Instructions:



SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No.

278161

page 1 of 4

Client Name: BBC International, Inc.  
Address: 1324 W. Maryland, Hobbs, NM 88240  
Phone/Fax: 575-397-6388 / 575-397-0397  
Client Contact: Cliff Brunsen Email:  
Project Name/No.: Marathon  
Site Name: Bertha Barber  
Site Location: Monument, NM  
Invoice To: Terry Persaud Ph: (713) 246-3570

| SAMPLE ID | DATE    | TIME | comp | grab | matrix  |        |             | bottle | size | pres. | Number of Containers |        |         | Requested Analysis |  |  |
|-----------|---------|------|------|------|---------|--------|-------------|--------|------|-------|----------------------|--------|---------|--------------------|--|--|
|           |         |      |      |      | W=water | S=soil | SL=sediment |        |      |       | 1=HCl                | 2=HNO3 | 3=H2SO4 |                    |  |  |
| MW 11     | 4-11-08 | 1015 |      | ✓    | W       |        |             | V      | 40   | 1     | ✓                    |        |         | Chloride, TDS      |  |  |
| MW 11     | 4-11-08 | 1015 |      | ✓    | W       |        |             | P      | X    | X     |                      |        |         | Metals Fe/Mn/Ba    |  |  |
| MW 11     | 4-11-08 | 1015 |      | ✓    | W       |        |             | P      | X    | 2     |                      |        |         |                    |  |  |
| MW 15     | 4-11-08 | 1110 |      | ✓    | W       |        |             | V      | 40   | 1     | ✓                    |        |         |                    |  |  |
| MW 15     | 4-11-08 | 1110 |      | ✓    | W       |        |             | P      | X    | X     |                      |        |         |                    |  |  |
| MW 15     | 4-11-08 | 1110 |      | ✓    | W       |        |             | P      | X    | 2     |                      |        |         |                    |  |  |
| MW 14     | 4-11-08 | 1358 |      | ✓    | W       |        |             | V      | 40   | 1     | ✓                    |        |         |                    |  |  |
| MW 14     | 4-11-08 | 1358 |      | ✓    | W       |        |             | P      | X    | X     |                      |        |         |                    |  |  |
| MW 14     | 4-11-08 | 1358 |      | ✓    | W       |        |             | P      | X    | 2     |                      |        |         |                    |  |  |
| MW 6      | 4-11-08 | 1435 |      | ✓    | W       |        |             | V      | 40   | 1     | ✓                    |        |         |                    |  |  |

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N  
Ice? ☐ Y ☐ N  
Temp: 3.0

|                                   |                                   |                                             |                                     |                                     |                                  |                                               |  |
|-----------------------------------|-----------------------------------|---------------------------------------------|-------------------------------------|-------------------------------------|----------------------------------|-----------------------------------------------|--|
| <b>Requested TAT</b>              |                                   | <b>Special Reporting Requirements</b>       |                                     | <b>Results:</b>                     |                                  | <b>Special Detection Limits (specify):</b>    |  |
| Contract <input type="checkbox"/> | 72hr <input type="checkbox"/>     | Standard QC <input type="checkbox"/>        | Level 3 QC <input type="checkbox"/> | Level 4 QC <input type="checkbox"/> | TX TRRP <input type="checkbox"/> | LA RECAP <input type="checkbox"/>             |  |
| 24hr <input type="checkbox"/>     | Standard <input type="checkbox"/> | 1. Relinquished by Sampler: <u>Amy Kuhl</u> |                                     | date <u>4-14-08</u>                 | time <u>16:40</u>                | 2. Received by: <u>[Signature]</u>            |  |
| 48hr <input type="checkbox"/>     |                                   | 3. Relinquished by:                         |                                     | date                                | time                             | 4. Received by:                               |  |
| Other <input type="checkbox"/>    |                                   | 5. Relinquished by:                         |                                     | date <u>4/15/08</u>                 | time <u>1000</u>                 | 6. Received by Laboratory: <u>[Signature]</u> |  |

☐ 8880 Interchange Drive  
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway  
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive  
Traverse City, MI 49686 (231) 947-5777



SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No.

278152

page 2 of 4

Client Name: BBL International, Inc.  
Address: 1324 W. Maryland, Hobbs, NM 88240  
Phone/Fax: 575-397-6388 / 575-397-0397  
Client Contact: Cliff Brinson Email:  
Project Name/No.: Marathon  
Site Name: Bertha Barber  
Site Location: Monument, NM  
Invoice To: Terry Le-saud Ph: 713 296-3570

matrix bottle size pres. Number of Containers  
W=water S=soil O=oil  
SL=sediment X=other  
P=plastic A=amber glass  
G=glass V=vial X=other  
1=1 liter 4=4oz 40=vial  
8=8oz 16=16oz X=other  
1=HCl 2=HNO3  
3=H2SO4 X=other

| SAMPLE ID | DATE    | TIME | comp | grab | matrix | bottle | size | pres. | Number of Containers | Requested Analysis |
|-----------|---------|------|------|------|--------|--------|------|-------|----------------------|--------------------|
| MW 6      | 4-11-08 | 1435 |      | ✓    | W      | P      | X    | X     | 1                    | Chloride, TDS      |
| MW 6      | 4-11-08 | 1435 |      | ✓    | W      | P      | X    | 2     | 1                    |                    |
| MW 9      | 4-11-08 | 1515 |      | ✓    | W      | V      | 40   | 1     | 3                    |                    |
| MW 9      | 4-11-08 | 1515 |      | ✓    | W      | P      | X    | X     | 1                    |                    |
| MW 9      | 4-11-08 | 1515 |      | ✓    | W      | P      | X    | 2     | 1                    |                    |
| MW 3      | 4-11-08 | 1602 |      | ✓    | W      | V      | 40   | 1     | 3                    |                    |
| MW 3      | 4-11-08 | 1602 |      | ✓    | W      | P      | X    | X     | 1                    |                    |
| MW 3      | 4-11-08 | 1602 |      | ✓    | W      | P      | X    | 2     | 1                    |                    |
| MW 16     | 4-11-08 | 1635 |      | ✓    | W      | V      | 40   | 1     | 3                    |                    |
| MW 16     | 4-11-08 | 1635 |      | ✓    | W      | P      | X    | X     | 1                    |                    |

Client/Consultant Remarks:

Laboratory remarks:

Intact? JY JN  
Ice? JY JN  
Temp? 30.0

Requested TAT

Contract ☐ 72hr  
24hr ☐ Standard  
48hr ☐  
Other ☐

Special Reporting Requirements Results: Fax ☐ Email ☐ PDF ☐ Special Detection Limits (specify):

Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

1. Relinquished by Sampler: Amy Ruth

date 4-14-08

time 16:40

3. Relinquished by:

date

time

5. Relinquished by:

date 4/15/08

time 1000

6. Received by Laboratory:

☐ 8880 Interchange Drive  
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway  
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive  
Traverse City, MI 49686 (231) 947-5777



SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No.

278153

page 3 of 4

Client Name: BBC International, Inc.  
Address: 1324 W. Maryland, Hobbs, NM 88240  
Phone/Fax: 575-397-6388 / 575-397-0397  
Client Contact: Cliff Brunsen Email:  
Project Name/No.: Marathon  
Site Name: Bertha Barber  
Site Location: Monument, NM  
Invoice To: Terry Persaud PK (713) 296-3510

Requested Analysis

| SAMPLE ID | DATE    | TIME | comp grab | matrix  |        |       |           | bottle | size | pres. | Number of Containers | RTK 8260 | Chloride, TDS | Metals Fe/Mn/Ba |  |  |  |  |  |
|-----------|---------|------|-----------|---------|--------|-------|-----------|--------|------|-------|----------------------|----------|---------------|-----------------|--|--|--|--|--|
|           |         |      |           | W=water | S=soil | O=oil | SL=sludge |        |      |       |                      |          |               |                 |  |  |  |  |  |
| MW 16     | 4-11-08 | 1635 | ✓         | W       |        |       |           | P      | X    | 2     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 7      | 4-11-08 | 1705 | ✓         | W       |        |       |           | V      | 40   | 1     | 3                    | ✓        |               |                 |  |  |  |  |  |
| MW 7      | 4-11-08 | 1705 | ✓         | W       |        |       |           | P      | X    | X     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 7      | 4-11-08 | 1705 | ✓         | W       |        |       |           | P      | X    | 2     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 8      | 4-11-08 | 1736 | ✓         | W       |        |       |           | V      | 40   | 1     | 3                    | ✓        |               |                 |  |  |  |  |  |
| MW 8      | 4-11-08 | 1736 | ✓         | W       |        |       |           | P      | X    | X     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 8      | 4-11-08 | 1736 | ✓         | W       |        |       |           | P      | X    | 2     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 12     | 4-11-08 | 1803 | ✓         | W       |        |       |           | V      | 40   | 1     | 3                    | ✓        |               |                 |  |  |  |  |  |
| MW 12     | 4-11-08 | 1803 | ✓         | W       |        |       |           | P      | X    | X     | 1                    |          | ✓             |                 |  |  |  |  |  |
| MW 12     | 4-11-08 | 1803 | ✓         | W       |        |       |           | P      | X    | 2     | 1                    |          | ✓             |                 |  |  |  |  |  |

Client/Consultant Remarks:

Laboratory remarks:

Intact? ☐ Y ☐ N  
Ice? ☐ Y ☐ N  
Temp: 5 °C

Requested TAT

Contract ☐ 72hr  
24hr ☐ Standard  
48hr ☐  
Other ☐

Special Reporting Requirements Results: Fax ☐ Email ☐ PDF ☐

Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

1. Relinquished by Sampler: Harry Smith

3. Relinquished by: Harry Smith

5. Relinquished by: Harry Smith

Special Detection Limits (specify):

2. Received by: Harry Smith

4. Received by: Harry Smith

6. Received by Laboratory: Harry Smith

☐ 8880 Interchange Drive  
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway  
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive  
Traverse City, MI 49686 (231) 947-5777



SPL, Inc.

Analysis Request & Chain of Custody Record

SPL Workorder No.

278154

page 4 of 4

|                                                          |         |                    |      |      |
|----------------------------------------------------------|---------|--------------------|------|------|
| Client Name: <u>BBC International</u>                    |         | Requested Analysis |      |      |
| Address: <u>1324 W. Marland/Hobbs, M</u>                 |         |                    |      |      |
| Phone/Fax: <u>575-397-6388/575-397-0397 188040</u>       |         |                    |      |      |
| Client Contact: <u>Cliff Brunson</u> Email:              |         |                    |      |      |
| Project Name/No.: <u>Marathon</u>                        |         |                    |      |      |
| Site Name: <u>Bertha Barker</u>                          |         |                    |      |      |
| Site Location: <u>Marathon, TX</u>                       |         |                    |      |      |
| Invoice To: <u>Terry Persaud</u> <u>Ph: 713/296-3570</u> |         |                    |      |      |
| SAMPLE ID                                                | DATE    | TIME               | comp | grab |
| MW13                                                     | 4-14-08 | 9:22               | X    |      |
| MW13                                                     | 4-14-08 | 9:22               | X    |      |
| MW13                                                     | 4-14-08 | 9:22               | X    |      |
| MW4                                                      | 4/14/08 | 10:30              | X    |      |
| MW4                                                      | 4/14/08 | 10:30              | X    |      |
| MW4                                                      | 4/14/08 | 10:30              | X    |      |
| MW5                                                      | 4/14/08 | 11:33              | X    |      |
| MW5                                                      | 4/14/08 | 11:33              | X    |      |
| MW5                                                      | 4/14/08 | 11:33              | X    |      |

|                                             |                                                   |                                                  |                                 |                      |               |                 |
|---------------------------------------------|---------------------------------------------------|--------------------------------------------------|---------------------------------|----------------------|---------------|-----------------|
| matrix                                      | bottle                                            | size                                             | pres.                           | Number of Containers | Chloride, TDS | Metals Fe/Mn/Cu |
| W=water S=soil O=oil<br>SL=sediment X=other | P=plastic A=amber glass<br>G=glass V=vial X=other | 1=1 liter 4=4oz 40=vial<br>8=8oz 16=16oz X=other | 1=HCl 2=HNO3<br>3=H2SO4 X=other |                      |               |                 |
| W                                           | V                                                 | 40                                               | 1                               | 3                    | X             |                 |
| W                                           | P                                                 | X                                                | X                               | 1                    | X             |                 |
| W                                           | P                                                 | X                                                | 2                               | 1                    |               | X               |
| W                                           | V                                                 | 40                                               | 1                               | 3                    | X             |                 |
| W                                           | P                                                 | X                                                | X                               | 1                    | X             |                 |
| W                                           | P                                                 | X                                                | 2                               | 1                    |               |                 |
| W                                           | V                                                 | 40                                               | 1                               | 3                    | X             |                 |
| W                                           | P                                                 | X                                                | X                               | 1                    | X             |                 |
| W                                           | P                                                 | X                                                | 2                               | 1                    |               | X               |

Intact? ☐ Y ☐ N  
Ice? ☐ Y ☐ N  
Temp: 20

Client/Consultant Remarks:

Laboratory remarks:

Requested TAT

Contract ☐ 72hr  
24hr ☐ Standard  
48hr ☐  
Other ☐

Special Reporting Requirements Results:

Standard QC ☐ Level 3 QC ☐ Level 4 QC ☐ TX TRRP ☐ LA RECAP ☐

1. Relinquished by Sampler:

3. Relinquished by:

5. Relinquished by:

Special Detection Limits (specify):

2. Received by: 4-14-08 time 10:40

4. Received by: 4-14-08 time 10:40

6. Received by Laboratory: 4-15-08 time 1000

Lab review (initial):

☐ 8880 Interchange Drive  
Houston, TX 77054 (713) 660-0901

☐ 500 Ambassador Caffery Parkway  
Scott, LA 70583 (337) 237-4775

☐ 459 Hughes Drive  
Traverse City, MI 49686 (231) 947-5777