

**3RP-079**

**Annual GW Report**

**DATE:**

**August 31 2009**

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August 31, 2009

Mr. Glenn Von Gonten  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Mr. Brandon Powell  
New Mexico Oil Conservation Division  
District 3 Office  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

**RE: Annual Groundwater Monitoring and Sampling Report for the Conoco Phillips  
and Clayton Investments Thomas No. 1 Well Location, Bloomfield, New  
Mexico; Permit #3RP-79-0 (July 1, 1988)**

Dear Sirs:

Pursuant to New Mexico Oil Conservation Division (OCD) requirements, Animas Environmental Services, LLC (AES), on behalf of Walsh Engineering and Production Corporation (Walsh Engineering) and Clayton Investments, submits this Annual Groundwater Monitoring and Sampling Report for 2009 for the Thomas No.1 well, which is located west of Bloomfield in the NW  $\frac{1}{4}$ , SW  $\frac{1}{4}$ , Section 30, T29N, R11W, San Juan County, New Mexico. Groundwater at the site has been monitored and sampled since 1988 under Permit #3RP-79-0. A site location map is included as Figure 1.

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## 1.0 Groundwater Monitoring and Sampling

On March 11 and June 4, 2009, BioTech Remediation, Inc. (BioTech) personnel completed groundwater elevation monitoring and sampling in MW-2 for the seventh and eighth consecutive quarterly sampling events. Groundwater samples from MW-2 were collected for laboratory analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) per EPA Method 8021. All samples were submitted to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico, for analysis. Water sample collection forms are included in Appendix A.



### **1.1 Depth to Groundwater Measurements**

Depth to groundwater measurements for the accessible monitoring wells (MW-2 through MW-5) were made with a Solinst Electronic Water Level and recorded prior to sampling activities. In March 2009, groundwater measurements indicated a general increase in elevations by approximately 0.15 feet across the site from the previous sampling event. Depth to groundwater varied between 2.34 feet below top of casing (TOC) in MW-3 to 3.94 feet below TOC in MW-2. Groundwater elevations across the site ranged from 5372.44 ft AMSL in MW-5 up to 5373.22 ft AMSL in MW-3. Hydraulic gradient was estimated to be approximately 0.003 ft/ft in a southwest direction across the site between MW-3 and MW-5.

In June 2009, groundwater measurements indicated a general decrease in elevations by approximately 0.10 feet across the site. Depth to groundwater varied between 2.66 feet below TOC in MW-3 to 4.04 feet below TOC in MW-2. Groundwater elevations across the site ranged from 5372.49 ft AMSL in MW-5 up to 5372.93 ft AMSL in MW-2. Hydraulic gradient was estimated to be approximately 0.002 ft/ft in a southwest direction across the site between MW-3 and MW-5.

Historical groundwater elevation data are summarized in Table 1, and groundwater elevation data for the March 11 and June 4, 2009, monitoring event are included on Figures 2 and 3, respectively.

### **1.2 Groundwater Sample Collection**

Following well measurements in March and June 2009, MW-2 was purged with a new disposable bailer, and a groundwater sample was collected from the well. The groundwater samples were then transferred into new clean sample containers with a slow release valve, labeled accordingly, and the Chain of Custody Record was completed. The samples were subsequently stored in an insulated cooler at approximately 4°C and transported to Hall, Albuquerque, New Mexico.

### **1.3 Dissolved Phase Contaminant Concentrations**

Analytical results of the groundwater samples collected from MW-2 on March 11 and June 4, 2009, indicate that benzene concentrations were below the New Mexico Water Quality Control Commission (WQCC) standard of 10 µg/L for both sampling events. Benzene concentrations were reported in MW-2 at 1.6 µg/L in March 2009 and were below the detection limit of 8.0 µg/L in June 2009. Toluene, ethylbenzene, and xylene concentrations in MW-2 were below applicable New Mexico WQCC standards or below laboratory detection limits in March and June 2009.

Historical groundwater contaminant concentration data are summarized in Table 2. Groundwater contaminant concentration data for the March 11 and June 4, 2009,

sampling events are shown on Figures 2 and 3, respectively. Groundwater analytical reports are included in Appendix A.

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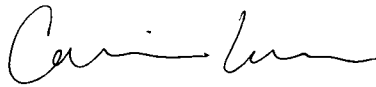
## 2.0 Conclusions

BioTech personnel conducted groundwater sampling on March 11 and June 4, 2009. Based on groundwater elevation data in March and June 2009, the hydraulic gradient at the site was calculated to be approximately 0.003 ft/ft and 0.002 ft/ft, in a southwest direction. Analytical results from both sampling events indicate that BTEX concentrations continue to remain below applicable WQCC standards for MW-2 for the past eight quarters of groundwater sampling.

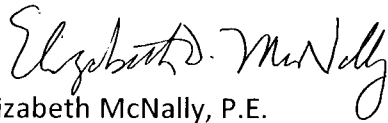
Because groundwater contaminant concentrations have remained below all applicable WQCC standards (BTEX), AES requests no further action status for the site.

If you have any questions regarding site conditions or this report, please contact Elizabeth McNally or Ross Kennemer at (505) 564-2281.

Sincerely,



Corwin Lameman  
Geologist Intern



Elizabeth McNally, P.E.

Attachments: Tables

Figures

Appendix A. Water Sample Collections Forms, March and June, 2009  
Laboratory Analytical Results, March and June 2009

*Mr. Glenn Van Gonten*

*Mr. Brandon Powell*

*August 31, 2009*

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Cc: Walsh Engineering and Production Corporation  
7415 E. Main St.  
Farmington, NM 87402

Robert Moss  
General Counsel  
Clayton Investments  
501 Airport Drive, Suite 100  
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Files:2009/Thomas Wells/2009 Annual Monitoring and Sampling Report

TABLE 1  
WATER QUALITY AND WELL DATA  
ConocoPhillips Thomas No. 1 Location  
Bloomfield, New Mexico

| <i>Well ID</i> | <i>Date Measured</i> | <i>Top of Casing Elevation (ft amsl)</i> | <i>Depth to Water (ft)</i> | <i>Water Level Elevation (ft amsl)</i> |
|----------------|----------------------|------------------------------------------|----------------------------|----------------------------------------|
| MW-1           | 7-Sep-01             | 5376.91                                  | 4.69                       | 5372.22                                |
| MW-1           | 4-Feb-02             | 5376.91                                  | 3.66                       | 5373.25                                |
| MW-1           | 30-Jul-02            | 5376.91                                  | 4.14                       | 5372.77                                |
| MW-1           | 4-Dec-02             | 5376.91                                  | 3.47                       | 5373.44                                |
| MW-1           | 3-Jul-03             | 5376.91                                  | 3.15                       | 5373.76                                |
| MW-1           | 19-Dec-03            | 5376.91                                  | 3.53                       | 5373.38                                |
| MW-1           | 12-Jul-04            | 5376.91                                  | 4.05                       | 5372.86                                |
| MW-1           | 3-Jan-05             | 5376.91                                  | 3.50                       | 5373.41                                |
| MW-1           | 25-Jul-05            | 5376.91                                  | 4.23                       | 5372.68                                |
| MW-1           | 30-Dec-05            | 5376.91                                  | 3.62                       | 5373.29                                |
| MW-1           | 8-Jun-06             | 5376.91                                  | 3.90                       | 5373.01                                |
| MW-1           | 10-Jan-07            | Buried by Oil Well Construction          |                            |                                        |
| MW-1           | 17-Jul-07            | Buried by Oil Well Construction          |                            |                                        |
|                |                      |                                          |                            |                                        |
| MW-2           | 7-Sep-01             | 5376.97                                  | 4.99                       | 5371.98                                |
| MW-2           | 4-Feb-02             | 5376.97                                  | 4.21                       | 5372.76                                |
| MW-2           | 30-Jul-02            | 5376.97                                  | 4.61                       | 5372.36                                |
| MW-2           | 4-Dec-02             | 5376.97                                  | 4.05                       | 5372.92                                |
| MW-2           | 3-Jul-03             | 5376.97                                  | 4.45                       | 5372.52                                |
| MW-2           | 19-Dec-03            | 5376.97                                  | 4.06                       | 5372.91                                |
| MW-2           | 12-Jul-04            | 5376.97                                  | 4.60                       | 5372.37                                |
| MW-2           | 3-Jan-05             | 5376.97                                  | 4.22                       | 5372.75                                |
| MW-2           | 25-Jul-05            | 5376.97                                  | 4.82                       | 5372.15                                |
| MW-2           | 30-Dec-05            | 5376.97                                  | 4.26                       | 5372.71                                |
| MW-2           | 8-Jun-06             | 5376.97                                  | 4.42                       | 5372.55                                |
| MW-2           | 10-Jan-07            | 5376.97                                  | 4.28                       | 5372.69                                |
| MW-2           | 17-Jul-07            | 5376.97                                  | 5.15                       | 5371.82                                |
| MW-2           | 27-Dec-07            | 5376.97                                  | 4.42                       | 5372.55                                |
| MW-2           | 13-Jan-09            | 5376.97                                  | 4.11                       | 5372.86                                |
| MW-2           | 11-Mar-09            | 5376.97                                  | 3.94                       | 5373.03                                |
| MW-2           | 4-Jun-09             | 5376.97                                  | 4.04                       | 5372.93                                |
|                |                      |                                          |                            |                                        |
| MW-3           | 7-Sep-01             | 5375.56                                  | 4.10                       | 5371.46                                |
| MW-3           | 4-Feb-02             | 5375.56                                  | 2.46                       | 5373.10                                |
| MW-3           | 30-Jul-02            | 5375.56                                  | 3.47                       | 5372.09                                |
| MW-3           | 4-Dec-02             | 5375.56                                  | 2.69                       | 5372.87                                |
| MW-3           | 3-Jul-03             | 5375.56                                  | 3.54                       | 5372.02                                |

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Bloomfield, New Mexico

| <i>Well ID</i> | <i>Date Measured</i> | <i>Top of Casing Elevation (ft amsl)</i> | <i>Depth to Water (ft)</i> | <i>Water Level Elevation (ft amsl)</i> |
|----------------|----------------------|------------------------------------------|----------------------------|----------------------------------------|
| MW-3           | 19-Dec-03            | 5375.56                                  | 2.78                       | 5372.78                                |
| MW-3           | 12-Jul-04            | 5375.56                                  | 3.40                       | 5372.16                                |
| MW-3           | 3-Jan-05             | 5375.56                                  | 2.82                       | 5372.74                                |
| MW-3           | 25-Jul-05            | 5375.56                                  | 3.72                       | 5371.84                                |
| MW-3           | 30-Dec-05            | 5375.56                                  | 2.84                       | 5372.72                                |
| MW-3           | 8-Jun-06             | 5375.56                                  | 3.20                       | 5372.36                                |
| MW-3           | 10-Jan-07            | 5375.56                                  | 2.86                       | 5372.70                                |
| MW-3           | 17-Jul-07            | 5375.56                                  | 4.03                       | 5371.53                                |
| MW-3           | 27-Dec-07            | 5375.56                                  | 3.02                       | 5372.54                                |
| MW-3           | 13-Jan-09            | 5375.56                                  | 2.68                       | 5372.88                                |
| MW-3           | 11-Mar-09            | 5375.56                                  | 2.34                       | 5373.22                                |
| MW-3           | 4-Jun-09             | 5375.56                                  | 2.66                       | 5372.90                                |
|                |                      |                                          |                            |                                        |
| MW-4           | 7-Sep-01             | 5375.56                                  | 3.91                       | 5371.65                                |
| MW-4           | 4-Feb-02             | 5375.56                                  | 2.82                       | 5372.74                                |
| MW-4           | 30-Jul-02            | 5375.56                                  | 3.53                       | 5372.03                                |
| MW-4           | 4-Dec-02             | 5375.56                                  | 2.81                       | 5372.75                                |
| MW-4           | 3-Jul-03             | 5375.56                                  | 3.38                       | 5372.18                                |
| MW-4           | 19-Dec-03            | 5375.56                                  | 2.87                       | 5372.69                                |
| MW-4           | 12-Jul-04            | 5375.56                                  | 3.46                       | 5372.10                                |
| MW-4           | 3-Jan-05             | 5375.56                                  | 3.00                       | 5372.56                                |
| MW-4           | 25-Jul-05            | 5375.56                                  | 3.74                       | 5371.82                                |
| MW-4           | 30-Dec-05            | 5375.56                                  | 3.03                       | 5372.53                                |
| MW-4           | 8-Jun-06             | 5375.56                                  | 3.24                       | 5372.32                                |
| MW-4           | 10-Jan-07            | 5375.56                                  | 3.03                       | 5372.53                                |
| MW-4           | 17-Jul-07            | 5375.56                                  | 4.05                       | 5371.51                                |
| MW-4           | 27-Dec-07            | 5375.56                                  | 3.18                       | 5372.38                                |
| MW-4           | 13-Jan-09            | 5375.56                                  | 2.87                       | 5372.69                                |
| MW-4           | 11-Mar-09            | 5375.56                                  | 2.83                       | 5372.73                                |
| MW-4           | 4-Jun-09             | 5375.56                                  | 2.85                       | 5372.71                                |
|                |                      |                                          |                            |                                        |
| MW-5           | 7-Sep-01             | 5376.35                                  | 5.86                       | 5370.49                                |
| MW-5           | 4-Feb-02             | 5376.35                                  | 4.19                       | 5372.16                                |
| MW-5           | 30-Jul-02            | 5376.35                                  | 5.27                       | 5371.08                                |
| MW-5           | 4-Dec-02             | 5376.35                                  | 4.49                       | 5371.86                                |
| MW-5           | 3-Jul-03             | 5376.35                                  | 3.89                       | 5372.46                                |
| MW-5           | 19-Dec-03            | 5376.35                                  | 4.23                       | 5372.12                                |

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ConocoPhillips Thomas No. 1 Location  
Bloomfield, New Mexico

| <i>Well ID</i> | <i>Date Measured</i> | <i>Top of Casing Elevation (ft amsl)</i> | <i>Depth to Water (ft)</i> | <i>Water Level Elevation (ft amsl)</i> |
|----------------|----------------------|------------------------------------------|----------------------------|----------------------------------------|
| MW-5           | 12-Jul-04            | 5376.35                                  | 5.13                       | 5371.22                                |
| MW-5           | 3-Jan-05             | 5376.35                                  | 4.60                       | 5371.75                                |
| MW-5           | 25-Jul-05            | 5376.35                                  | DRY                        | DRY                                    |
| MW-5           | 30-Dec-05            | 5376.35                                  | 4.28                       | 5372.07                                |
| MW-5           | 8-Jun-06             | 5376.35                                  | 4.63                       | 5371.72                                |
| MW-5           | 10-Jan-07            | 5376.35                                  | 4.30                       | 5372.05                                |
| MW-5           | 17-Jul-07            | 5376.35                                  | 5.63                       | 5370.72                                |
| MW-5           | 27-Dec-07            | 5376.35                                  | 4.58                       | 5371.77                                |
| MW-5           | 13-Jan-09            | 5376.35                                  | 4.35                       | 5372.00                                |
| MW-5           | 11-Mar-09            | 5376.35                                  | 3.91                       | 5372.44                                |
| MW-5           | 4-Jun-09             | 5376.35                                  | 3.86                       | 5372.49                                |



TABLE 2. GROUNDWATER ANALYTICAL RESULTS  
ConocoPhillips Thomas No. 1 Location  
Bloomfield, New Mexico

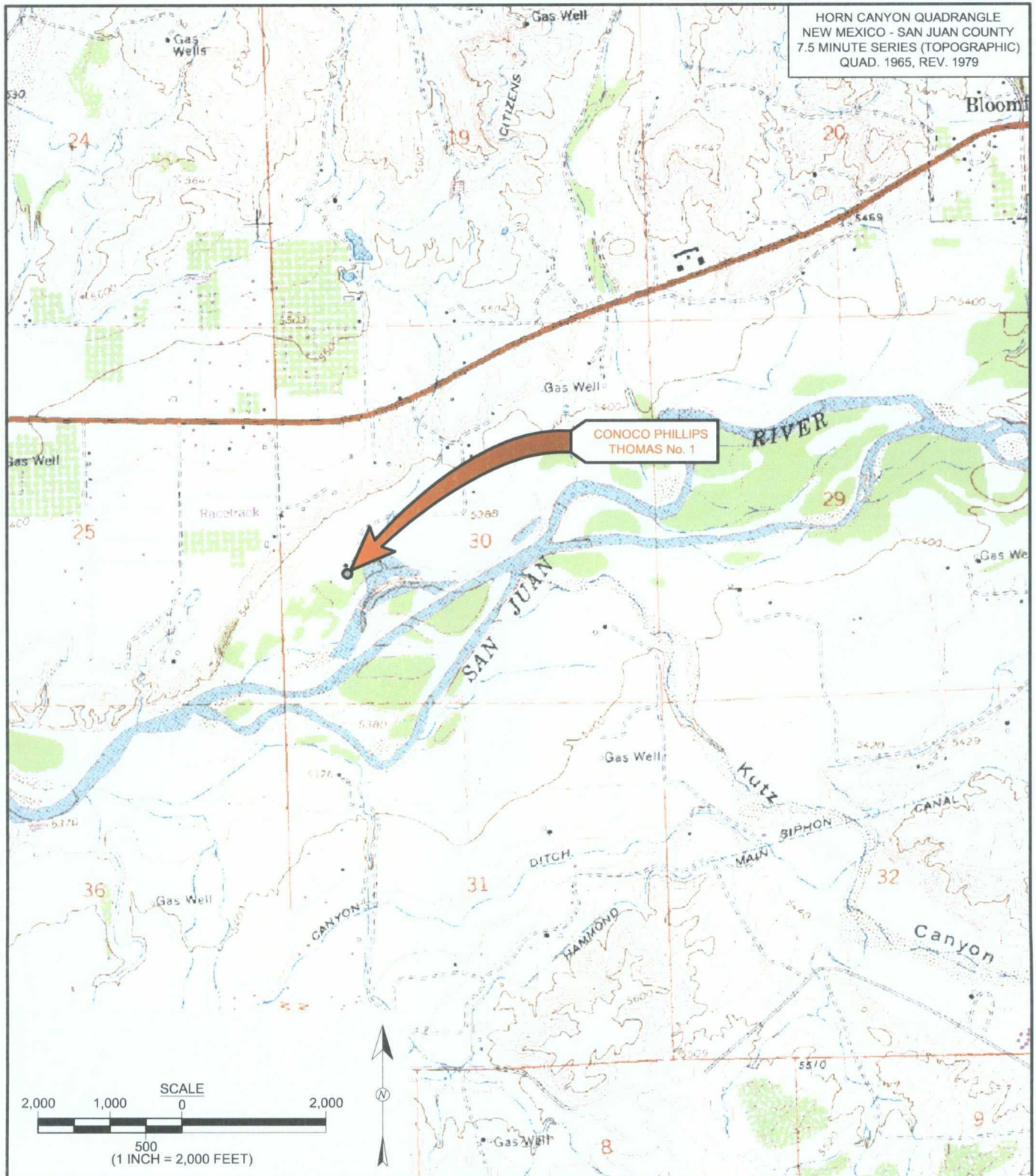
| <i>Sample ID</i>         | <i>Sample Date</i> | <i>Analytical Method</i> | <i>Benzene</i><br>( $\mu\text{g/L}$ ) | <i>Toluene</i><br>( $\mu\text{g/L}$ ) | <i>Ethyl-<br/>benzene</i><br>( $\mu\text{g/L}$ ) | <i>Xylenes</i><br>( $\mu\text{g/L}$ ) | <i>MTBE</i><br>( $\mu\text{g/L}$ ) | <i>TPH<br/>C6 - C10</i><br>( $\text{mg/L}$ ) |
|--------------------------|--------------------|--------------------------|---------------------------------------|---------------------------------------|--------------------------------------------------|---------------------------------------|------------------------------------|----------------------------------------------|
| <b>NM WQCC Standards</b> |                    |                          | <b>10</b>                             | <b>750</b>                            | <b>750</b>                                       | <b>620</b>                            | <b>100</b>                         | <b>NE</b>                                    |
| MW-2                     | 7-Sep-01           | 8021/8015                | <2.5                                  | <2.5                                  | 25                                               | 63.2                                  | <5.0                               | ns                                           |
| MW-2                     | 4-Feb-02           | 8021/8015                | 120                                   | 9.0                                   | 76                                               | 373.6                                 | 2.8                                | ns                                           |
| MW-2                     | 30-Jul-02          | 8021/8015                | 50                                    | <2.5                                  | 49                                               | 245.6                                 | <5.0                               | ns                                           |
| MW-2                     | 4-Dec-02           | 8021/8015                | 87                                    | <2.5                                  | 67                                               | 270                                   | <13                                | ns                                           |
| MW-2                     | 3-Jul-03           | 8021/8015                | 150                                   | <2.5                                  | 87                                               | 430                                   | <13                                | ns                                           |
| MW-2                     | 19-Dec-03          | 8021/8015                | 56                                    | <2.5                                  | 74                                               | 150                                   | <13                                | ns                                           |
| MW-2                     | 12-Jul-04          | 8021/8015                | 89                                    | 3.4                                   | 110                                              | 1100                                  | <13                                | 5.1                                          |
| MW-2                     | 3-Jan-05           | 8021/8015                | 16                                    | <2.5                                  | 35                                               | 420                                   | <13                                | 2.4                                          |
| MW-2                     | 25-Jul-05          | 8021/8015                | 46                                    | <2.5                                  | 59                                               | 360                                   | <13                                | 3.0                                          |
| MW-2                     | 30-Dec-05          | 8021/8015                | 5.2                                   | <0.5                                  | 15                                               | 33                                    | <2.5                               | 1.5                                          |
| MW-2                     | 8-Jun-06           | 8021/8015                | 6.6                                   | <0.5                                  | 25                                               | 86                                    | <2.5                               | 1.3                                          |
| MW-2                     | 10-Jan-07          | 8021/8015                | 6.1                                   | 21                                    | 21                                               | 96                                    | <2.5                               | 1.4                                          |
| MW-2                     | 17-Jul-07          | 8021/8015                | <5.0                                  | 40                                    | 12                                               | 34                                    | <25                                | 1.2                                          |
| MW-2                     | 27-Dec-07          | 8021/8015                | 2.4                                   | <1.0                                  | 4.2                                              | 76                                    | <2.5                               | 0.88                                         |
| MW-2                     | 13-Jan-09          | 8021/8015                | 1.3                                   | <1.0                                  | 4.8                                              | 140                                   | <2.5                               | 1.3                                          |
| MW-2                     | 11-Mar-09          | 8021                     | 1.6                                   | 3.6                                   | 12                                               | 160                                   | <2.5                               | ns                                           |
| MW-2                     | 4-Jun-09           | 8021                     | <8.0                                  | <8.0                                  | 16                                               | 190                                   | ns                                 | ns                                           |
|                          |                    |                          |                                       |                                       |                                                  |                                       |                                    |                                              |
| MW-3                     | 7-Sep-01           | 8021/8015                | 130                                   | <0.5                                  | 51                                               | 372.9                                 | <1.0                               | <3.0                                         |
| MW-3                     | 4-Feb-02           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-3                     | 30-Jul-02          | 8021/8015                | <0.5                                  | 2.3                                   | 9.5                                              | 8.6                                   | <1.0                               | ns                                           |
| MW-3                     | 4-Dec-02           | 8021/8015                | 0.6                                   | 1.7                                   | 2.4                                              | 6.2                                   | <2.5                               | ns                                           |
| MW-3                     | 3-Jul-03           | 8021/8015                | <0.5                                  | 2.3                                   | 6.2                                              | 8.5                                   | <2.5                               | ns                                           |
| MW-3                     | 19-Dec-03          | 8021/8015                | <0.5                                  | 1.2                                   | 6.6                                              | 9.5                                   | <2.5                               | ns                                           |
| MW-3                     | 12-Jul-04          | 8021/8015                | 0.6                                   | 1.7                                   | 12                                               | 12                                    | <2.5                               | 0.6                                          |
| MW-3                     | 3-Jan-05           | 8021/8015                | <0.5                                  | 1.7                                   | 5.7                                              | 7                                     | <2.5                               | 0.4                                          |
| MW-3                     | 25-Jul-05          | 8021/8015                | <0.5                                  | 1.2                                   | 12                                               | 10                                    | <2.5                               | 0.81                                         |
| MW-3                     | 30-Dec-05          | 8021/8015                | <0.5                                  | 0.8                                   | 5.8                                              | 6                                     | <2.5                               | 0.54                                         |
| MW-3                     | 8-Jun-06           | 8021/8015                | <0.5                                  | <0.5                                  | 16                                               | 23                                    | <2.5                               | 0.76                                         |
| MW-3                     | 10-Jan-07          | 8021/8015                | <0.5                                  | <0.5                                  | 4.7                                              | 8.7                                   | <2.5                               | 0.62                                         |
| MW-3                     | 17-Jul-07          | 8021/8015                | <0.5                                  | 22                                    | 7.7                                              | 14.0                                  | <2.5                               | 0.75                                         |
| MW-3                     | 27-Dec-07          | 8021/8015                | 2.3                                   | <1.0                                  | 8.0                                              | 23                                    | <2.5                               | 0.51                                         |
| MW-3                     | 13-Jan-09          | 8021/8015                | <1.0                                  | 1.6                                   | 9.0                                              | 29                                    | <2.5                               | 0.47                                         |
| MW-3                     | 11-Mar-09          | 8021                     | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-3                     | 4-Jun-09           | 8021                     | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
|                          |                    |                          |                                       |                                       |                                                  |                                       |                                    |                                              |

TABLE 2. GROUNDWATER ANALYTICAL RESULTS  
 ConocoPhillips Thomas No. 1 Location  
 Bloomfield, New Mexico

| <i>Sample ID</i>         | <i>Sample Date</i> | <i>Analytical Method</i> | <i>Benzene</i><br>( $\mu\text{g/L}$ ) | <i>Toluene</i><br>( $\mu\text{g/L}$ ) | <i>Ethyl-<br/>benzene</i><br>( $\mu\text{g/L}$ ) | <i>Xylenes</i><br>( $\mu\text{g/L}$ ) | <i>MTBE</i><br>( $\mu\text{g/L}$ ) | <i>TPH<br/>C6 - C10</i><br>( $\text{mg/L}$ ) |
|--------------------------|--------------------|--------------------------|---------------------------------------|---------------------------------------|--------------------------------------------------|---------------------------------------|------------------------------------|----------------------------------------------|
| <b>NM WQCC Standards</b> |                    |                          | <b>10</b>                             | <b>750</b>                            | <b>750</b>                                       | <b>620</b>                            | <b>100</b>                         | <b>NE</b>                                    |
| MW-4                     | 7-Sep-01           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 4-Feb-02           | 8021/8015                | <0.5                                  | 6.9                                   | 8.2                                              | 18.7                                  | 1.0                                | ns                                           |
| MW-4                     | 30-Jul-02          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 4-Dec-02           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 3-Jul-03           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 19-Dec-03          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 12-Jul-04          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 3-Jan-05           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 8-Jun-06           | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 10-Jan-07          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 17-Jul-07          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 27-Dec-07          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 13-Jan-09          | 8021/8015                | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 11-Mar-09          | 8021                     | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |
| MW-4                     | 4-Jun-09           | 8021                     | ns                                    | ns                                    | ns                                               | ns                                    | ns                                 | ns                                           |

**Notes:**

< Analyte not detected above listed method limit  
 ( $\mu\text{g/L}$ ) Micrograms per Liter (ppb)  
 ( $\text{mg/L}$ ) Milligrams per Liter (ppm)  
 ns Not Sampled



AES

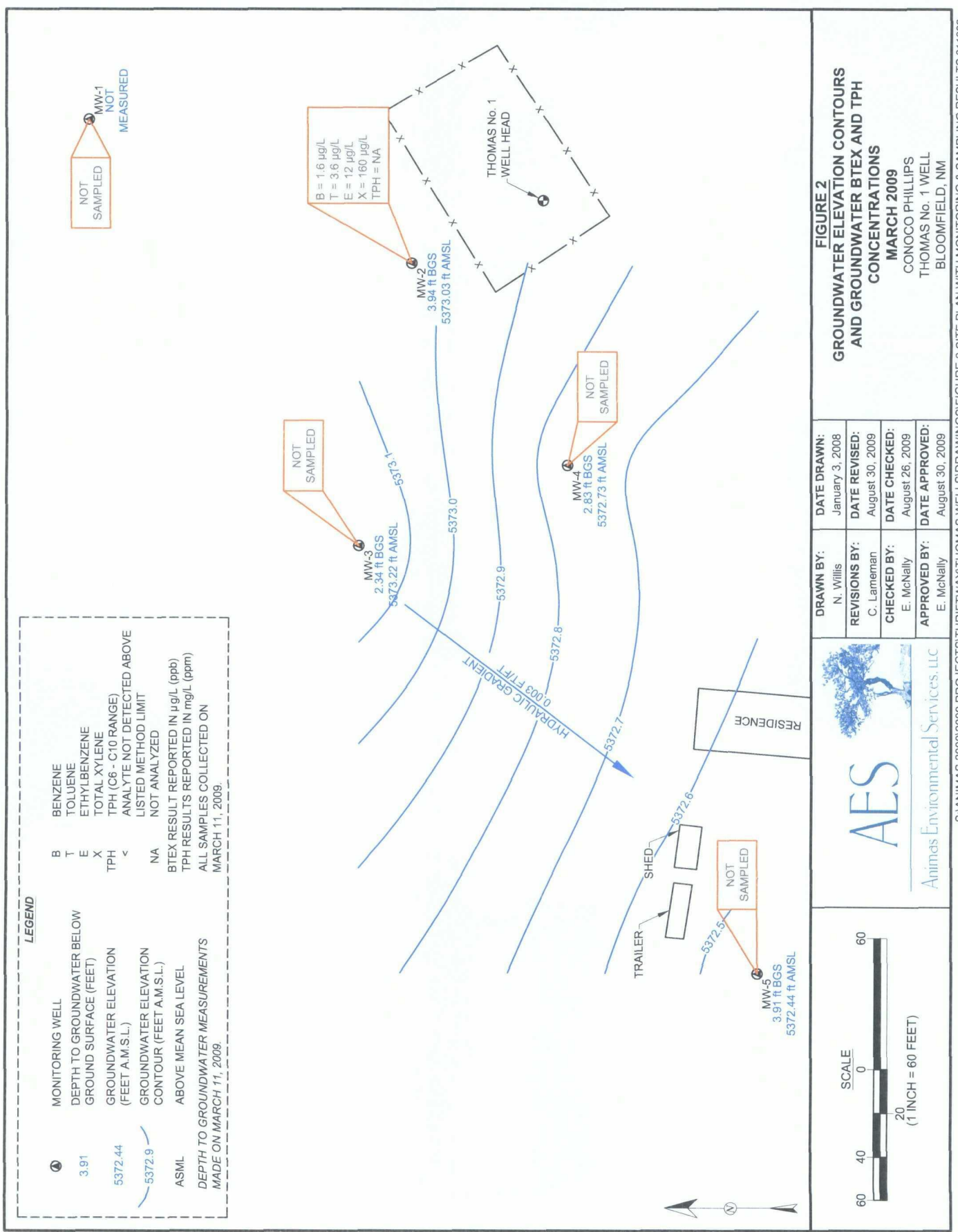


Animas Environmental Services, LLC

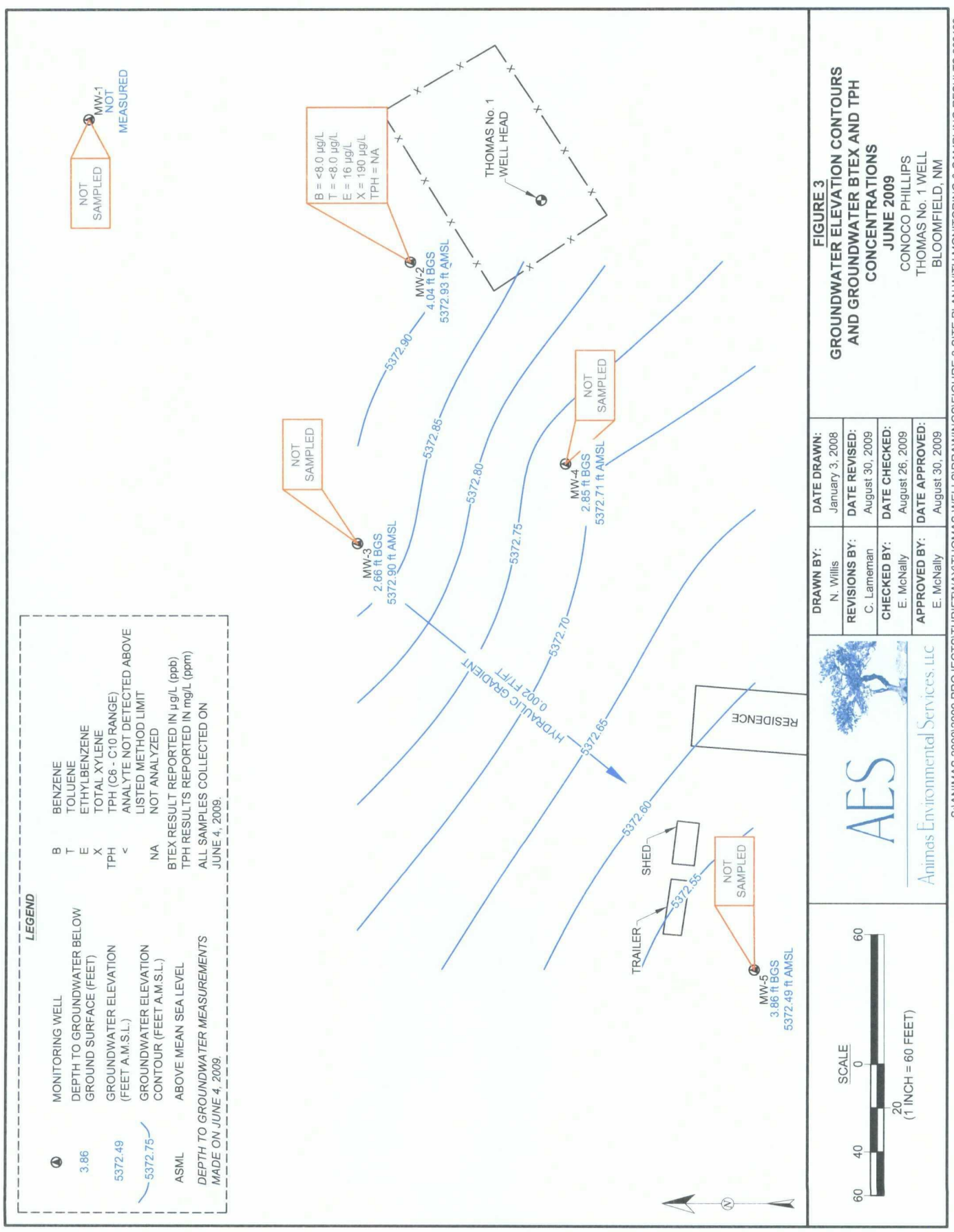
|                            |                                    |
|----------------------------|------------------------------------|
| DRAWN BY:<br>N. Willis     | DATE DRAWN:<br>January 3, 2008     |
| REVISIONS BY:<br>N. Willis | DATE REVISED:<br>February 10, 2009 |
| CHECKED BY:<br>E. McNally  | DATE CHECKED:<br>August 26, 2009   |
| APPROVED BY:<br>E. McNally | DATE APPROVED:<br>August 30, 2009  |

**FIGURE 1  
TOPOGRAPHIC SITE LOCATION MAP**

CONOCO PHILLIPS  
THOMAS No. 1  
NW ¼ SW ¼ SEC. 30, T29N, R11W  
SAN JUAN COUNTY, NEW MEXICO  
N 36° 41' 42.416", W 108° 02' 16.674"







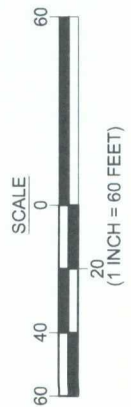
**FIGURE 3**  
**GROUNDWATER ELEVATION CONTOURS**  
**AND GROUNDWATER BTEX AND TPH**  
**CONCENTRATIONS**  
**JUNE 2009**

CONOCO PHILLIPS  
 THOMAS No. 1 WELL  
 BLOOMFIELD, NM

|                      |             |                       |                 |
|----------------------|-------------|-----------------------|-----------------|
| <b>DRAWN BY:</b>     | N. Willis   | <b>DATE DRAWN:</b>    | January 3, 2008 |
| <b>REVISIONS BY:</b> | C. Lammiman | <b>DATE REVISED:</b>  | August 30, 2009 |
| <b>CHECKED BY:</b>   | E. McNally  | <b>DATE CHECKED:</b>  | August 26, 2009 |
| <b>APPROVED BY:</b>  | E. McNally  | <b>DATE APPROVED:</b> | August 30, 2009 |



**AES**  
 Animas Environmental Services, LLC



## **Animas Environmental Services**

Monitor Well No: **MW-2**

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Monitoring and Sampling

Project No.: THOMAS No. 1 WELL

**Site:** Burlington Resources Oil and Gas Company's

Date: 3-11-09

**Location:** Thomas No. 1 Well

Time: 1530

**Sampler:** Mike Beauparlant

Weather: CLEAR 1 mile

**Sampling Method:** Purge - Disposable Bailer

Air Temperature:  $60^{\circ}+$

Depth of Well (ft): 9.0'

Well Diam. (in.): 2

Depth to Water (ft): 3.94'

**Site Elevation (ft):**

[illegible]

**Analytical Parameters Sampled For (include Method #):**

BTEX Per EPA Method 8021

### Disposal of Purged Water:

On asphalt or concrete pavement

**Chain of Custody Record Complete? (Y/N)**

Yes

**Analytical Laboratory:**

Hall Environmental Analysis Laboratory

**Equipment Used During Sampling:**

Keck Water Level; YSI Water Quality Meter;

### and New Disposable Bailer

### Other Notes/Comments

$9' 3.94' : 5' \times .1632 = 0.667 : 1 \times 3 = 26.1$

# Thomas Wells #1 S/m

1-13-09

|      |       |      | Save Time |        |
|------|-------|------|-----------|--------|
| mw#2 | 4.11' | 1203 | 1121      | Sample |
| mw#3 | 2.68  | 1239 | 1250      | Sample |
| mw#4 | 2.87  | 1308 | NS        |        |
| mw#5 | 4.35' | 1325 | NS        |        |

## #511 MEXICAN WATER

2-7-09

|      | DTW   | Time | 8260   |
|------|-------|------|--------|
| mw#1 | 38.96 | 1331 | Sample |
| TW#1 | DRY   | 1345 | 1353   |
|      |       |      | NS     |

## Thomas Well #1 S/m

3-11-09

|      | DTW   | Time | 8021   |
|------|-------|------|--------|
| mw#5 |       |      | Sample |
| mw#2 | 3.94' | 1335 | 154    |
| mw#3 | 2.34' | 1604 | NS     |
| mw#4 | 2.85' | 1609 | NS     |
| mw#5 | 3.91' | 1618 | NS     |

Sample to AES 3-13-09



## COVER LETTER

Monday, March 23, 2009

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401

TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Thomas Well #1

Order No.: 0903242

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 3/17/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425  
AZ license # AZ0682  
ORELAP Lab # NM100001  
Texas Lab# T104704424-08-TX





**Hall Environmental Analysis Laboratory, Inc.**

Date: 23-Mar-09

CLIENT: Animas Environmental Services

Client Sample ID: MW #2

Lab Order: 0903242

Collection Date: 3/11/2009 3:44:00 PM

Project: Thomas Well #1

Date Received: 3/17/2009

Lab ID: 0903242-01

Matrix: AQUEOUS

| Analyses                           | Result | PQL      | Qual | Units | DF | Date Analyzed        |
|------------------------------------|--------|----------|------|-------|----|----------------------|
| <b>EPA METHOD 8021B: VOLATILES</b> |        |          |      |       |    | Analyst: DAM         |
| Methyl tert-butyl ether (MTBE)     | ND     | 2.5      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| Benzene                            | 1.6    | 1.0      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| Toluene                            | 3.6    | 1.0      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| Ethylbenzene                       | 12     | 1.0      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| Xylenes, Total                     | 160    | 2.0      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| 1,2,4-Trimethylbenzene             | 120    | 5.0      |      | µg/L  | 5  | 3/20/2009 3:59:57 PM |
| 1,3,5-Trimethylbenzene             | 79     | 1.0      |      | µg/L  | 1  | 3/20/2009 4:30:29 PM |
| Surr: 4-Bromofluorobenzene         | 112    | 65.9-130 |      | %REC  | 1  | 3/20/2009 4:30:29 PM |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
RL Reporting Limit

Page 1 of 2

**Hall Environmental Analysis Laboratory, Inc.**

Date: 23-Mar-09

CLIENT: Animas Environmental Services

Client Sample ID: TRIP BLANK

Lab Order: 0903242

Collection Date:

Project: Thomas Well #1

Date Received: 3/17/2009

Lab ID: 0903242-02

Matrix: TRIP BLANK

| Analyses                           | Result | PQL      | Qual | Units | DF | Date Analyzed        |
|------------------------------------|--------|----------|------|-------|----|----------------------|
| <b>EPA METHOD 8021B: VOLATILES</b> |        |          |      |       |    | Analyst: DAM         |
| Methyl tert-butyl ether (MTBE)     | ND     | 2.5      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| Benzene                            | ND     | 1.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| Toluene                            | ND     | 1.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| Ethylbenzene                       | ND     | 1.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| Xylenes, Total                     | ND     | 2.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| 1,2,4-Trimethylbenzene             | ND     | 1.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| 1,3,5-Trimethylbenzene             | ND     | 1.0      |      | µg/L  | 1  | 3/20/2009 5:31:23 PM |
| Surr: 4-Bromofluorobenzene         | 89.7   | 65.9-130 |      | %REC  | 1  | 3/20/2009 5:31:23 PM |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Estimated value  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
MCL Maximum Contaminant Level  
RL Reporting Limit

Page 2 of 2

## QA/QC SUMMARY REPORT

Client: Animas Environmental Services  
 Project: Thomas Well #1

Work Order: 0903242

| Analyte | Result | Units | PQL | %Rec | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|

Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB

MBLK

Batch ID: R32876 Analysis Date: 3/20/2009 9:15:35 AM

|                                |    |      |     |
|--------------------------------|----|------|-----|
| Methyl tert-butyl ether (MTBE) | ND | µg/L | 2.5 |
| Benzene                        | ND | µg/L | 1.0 |
| Toluene                        | ND | µg/L | 1.0 |
| Ethylbenzene                   | ND | µg/L | 1.0 |
| Xylenes, Total                 | ND | µg/L | 2.0 |
| 1,2,4-Trimethylbenzene         | ND | µg/L | 1.0 |
| 1,3,5-Trimethylbenzene         | ND | µg/L | 1.0 |

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R32876 Analysis Date: 3/19/2009 6:37:03 PM

|                                |       |      |     |     |      |     |
|--------------------------------|-------|------|-----|-----|------|-----|
| Methyl tert-butyl ether (MTBE) | 22.31 | µg/L | 2.5 | 112 | 51.2 | 138 |
| Benzene                        | 20.92 | µg/L | 1.0 | 105 | 85.9 | 113 |
| Toluene                        | 21.84 | µg/L | 1.0 | 109 | 86.4 | 113 |
| Ethylbenzene                   | 21.50 | µg/L | 1.0 | 107 | 83.5 | 118 |
| Xylenes, Total                 | 63.90 | µg/L | 2.0 | 107 | 83.4 | 122 |
| 1,2,4-Trimethylbenzene         | 21.78 | µg/L | 1.0 | 108 | 83.5 | 115 |
| 1,3,5-Trimethylbenzene         | 20.85 | µg/L | 1.0 | 104 | 85.2 | 113 |

## Qualifiers:

|   |                                            |    |                                                    |
|---|--------------------------------------------|----|----------------------------------------------------|
| E | Estimated value                            | H  | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not Detected at the Reporting Limit                |
| R | RPD outside accepted recovery limits       | S  | Spike recovery outside accepted recovery limits    |

# Hall Environmental Analysis Laboratory, Inc.

## Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL

Date Received:

3/17/2009

Work Order Number 0903242

Received by: AT

Checklist completed by:

Signature [Signature]

Date 3/17/09

Sample ID labels checked by:

Initials [Initials]

Matrix:

Carrier name: Greyhound

|                                                         |                                                 |                                         |                                                                           |
|---------------------------------------------------------|-------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>                                      |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | Not Present <input type="checkbox"/> Not Shipped <input type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | N/A <input checked="" type="checkbox"/>                                   |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                           |
| Water - VOA vials have zero headspace?                  | No VOA vials submitted <input type="checkbox"/> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>                                               |
| Water - Preservation labels on bottle and cap match?    | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | N/A <input checked="" type="checkbox"/>                                   |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | N/A <input checked="" type="checkbox"/>                                   |

Container/Temp Blank temperature?

1°

<6° C Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_





# MONITORING WELL SAMPLING RECORD

Animas Environmental Services

Monitor Well No: MW-2

624 E. Comanche, Farmington NM 87401

Tel. (505) 564-2281 Fax (505) 324-2022

Conoco Phillips and Clayton  
Investments Thomas No. 1 Well

Site: Location

Project No.: AES 050302

Location: Bloomfield, NM

Date: 6-4-09

Project: Annual Sampling

Arrival Time: 21420

Sampling Technician: W3

Air Temp: 80°F

Purge / No Purge:

T.O.C. Elev. (ft): 5376.97

Well Diameter (in): 2"

Total Well Depth (ft): 9' 8"

Initial D.T.W. (ft): 4.04'

Time: 1427 (taken at initial gauging of all wells)

Confirm D.T.W. (ft): 4.04'

Time: 1434 (taken prior to purging well)

Final D.T.W. (ft): 8.91

Time: 1449 (taken after sample collection)

## Water Quality Parameters - Recorded During Well Purging

| Time | Temp<br>(deg C) | Conductivity<br>(µS) (mS) | DO<br>(mg/L) | pH   | ORP<br>(mV) | PURGED VOLUME<br>(see reverse for calc.) | Notes/Observations |
|------|-----------------|---------------------------|--------------|------|-------------|------------------------------------------|--------------------|
| 1436 | 17.20           | 1.350                     | 1.20         | 6.25 | 306.9       | .5                                       |                    |
| 1439 | 16.31           | 1.450                     | 0.70         | 6.05 | 319.5       | 1.0                                      | Low Yield          |
| 1445 | 16.17           | 1.458                     | 0.32         | 5.99 | 322.9       | 2.1.25                                   |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |
|      |                 |                           |              |      |             |                                          |                    |

## Analytical Parameters (include analysis method and number and type of sample containers)

BTEX 8021 (3) 40mL VOAs w/ HCl

Disposal of Purged Water:

Collected Samples Stored on Ice in Cooler:

Chain of Custody Record Complete:

Analytical Laboratory: Hall Environmental Analysis Laboratories, Albuquerque, NM

Equipment Used During Sampling:

Keck Water Level, YSI Water Quality Meter,

and New Disposable Bailor

Notes/Comments

$9' - 4.04' = 4.96' \times .1632 = .809' = 2.4641$



## COVER LETTER

Wednesday, June 10, 2009

Ross Kennemer  
Animas Environmental Services  
624 East Comanche  
Farmington, NM 87401

TEL: (505) 564-2281  
FAX (505) 324-2022

RE: Thomas Wells

Order No.: 0906117

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 6/5/2009 for the analyses presented in the following report.

This report is an addendum to the report dated June 9, 2009. This is an updated report.

No determination of compounds below these (denoted by the ND or < sign) has been made. Please don't hesitate to contact Hall Environmental for any additional information or clarifications.

Reporting limits are determined by EPA methodology.

~~---Please don't hesitate to contact HEAL for any additional information or clarifications---~~

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager





**Hall Environmental Analysis Laboratory, Inc.**

Date: 10-Jun-09

**CLIENT:** Animas Environmental Services  
**Project:** Thomas Wells  
**Lab Order:** 0906117

**CASE NARRATIVE**

Analytical Comments for METHOD 8021BTEX\_W, SAMPLE 0906117-01A: necessary dilution;  
foamy sample

**Hall Environmental Analysis Laboratory, Inc.**

Date: 10-Jun-09

**CLIENT:** Animas Environmental Services  
**Project:** Thomas Wells**Lab Order:** 0906117**Lab ID:** 0906117-01**Collection Date:** 6/4/2009 2:45:00 PM**Client Sample ID:** MW-2**Matrix:** AQUEOUS

| Analyses                           | Result | PQL      | Qual | Units | DF | Date Analyzed       |
|------------------------------------|--------|----------|------|-------|----|---------------------|
| <b>EPA METHOD 8021B: VOLATILES</b> |        |          |      |       |    | Analyst: DAM        |
| Benzene                            | ND     | 8.0      |      | µg/L  | 20 | 6/9/2009 2:27:09 AM |
| Toluene                            | ND     | 8.0      |      | µg/L  | 20 | 6/9/2009 2:27:09 AM |
| Ethylbenzene                       | 16     | 8.0      |      | µg/L  | 20 | 6/9/2009 2:27:09 AM |
| Xylenes, Total                     | 190    | 24       |      | µg/L  | 20 | 6/9/2009 2:27:09 AM |
| Surr: 4-Bromofluorobenzene         | 98.5   | 65.9-130 |      | %REC  | 20 | 6/9/2009 2:27:09 AM |

**Lab ID:** 0906117-02**Collection Date:****Client Sample ID:** Trip Blank**Matrix:** TRIP BLANK

| Analyses                           | Result | PQL      | Qual | Units | DF | Date Analyzed       |
|------------------------------------|--------|----------|------|-------|----|---------------------|
| <b>EPA METHOD 8021B: VOLATILES</b> |        |          |      |       |    | Analyst: DAM        |
| Benzene                            | ND     | 0.40     |      | µg/L  | 1  | 6/9/2009 3:28:05 AM |
| Toluene                            | ND     | 0.40     |      | µg/L  | 1  | 6/9/2009 3:28:05 AM |
| Ethylbenzene                       | ND     | 0.40     |      | µg/L  | 1  | 6/9/2009 3:28:05 AM |
| Xylenes, Total                     | ND     | 1.2      |      | µg/L  | 1  | 6/9/2009 3:28:05 AM |
| Surr: 4-Bromofluorobenzene         | 98.7   | 65.9-130 |      | %REC  | 1  | 6/9/2009 3:28:05 AM |

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

## QA/QC SUMMARY REPORT

Client: Animas Environmental Services  
 Project: Thomas Wells

Work Order: 0906117

| Analyte | Result | Units | PQL | %Rec | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|
|---------|--------|-------|-----|------|----------|-----------|------|----------|------|

Method: EPA Method 8021B: Volatiles

Sample ID: 5ML RB

MBLK

Batch ID: R33990 Analysis Date: 6/8/2009 9:19:59 AM

|                |    |      |     |
|----------------|----|------|-----|
| Benzene        | ND | µg/L | 1.0 |
| Toluene        | ND | µg/L | 1.0 |
| Ethylbenzene   | ND | µg/L | 1.0 |
| Xylenes, Total | ND | µg/L | 2.0 |

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R33990 Analysis Date: 6/9/2009 3:58:35 AM

|                |       |      |     |      |      |     |
|----------------|-------|------|-----|------|------|-----|
| Benzene        | 19.41 | µg/L | 1.0 | 97.1 | 85.9 | 113 |
| Toluene        | 19.96 | µg/L | 1.0 | 99.0 | 86.4 | 113 |
| Ethylbenzene   | 20.13 | µg/L | 1.0 | 99.9 | 83.5 | 118 |
| Xylenes, Total | 60.89 | µg/L | 2.0 | 101  | 83.4 | 122 |

Sample ID: 100NG BTEX LCSD

LCSD

Batch ID: R33990 Analysis Date: 6/9/2009 4:29:02 AM

|                |       |      |     |      |      |     |       |    |
|----------------|-------|------|-----|------|------|-----|-------|----|
| Benzene        | 19.45 | µg/L | 1.0 | 97.3 | 85.9 | 113 | 0.185 | 27 |
| Toluene        | 19.43 | µg/L | 1.0 | 96.4 | 86.4 | 113 | 2.66  | 19 |
| Ethylbenzene   | 19.48 | µg/L | 1.0 | 96.6 | 83.5 | 118 | 3.31  | 10 |
| Xylenes, Total | 58.99 | µg/L | 2.0 | 98.3 | 83.4 | 122 | 3.17  | 13 |

## Qualifiers:

|   |                                            |    |                                                    |
|---|--------------------------------------------|----|----------------------------------------------------|
| E | Estimated value                            | H  | Holding times for preparation or analysis exceeded |
| J | Analyte detected below quantitation limits | ND | Not Detected at the Reporting Limit                |
| R | RPD outside accepted recovery limits       | S  | Spike recovery outside accepted recovery limits    |

# Chain-of-Custody Record

Client: Almas Environmental Services, LLC

Mailing Address: 624 E Comanche, Farmington, NM 87401

Phone #: 505-564-2281

Email or Fax#: 505-324-2022

QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)

Accreditation ☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Thomas Wells

Project #: 050302

Thomas Wells

Project Manager:

Ross Kummer

Sampler: Mike Braun

Sample Temperature: 9.9

Container Type and #

4ml 3

Preservative Type

HCL

HELD IN

09/01/02

-1

2

X

BTEX + MTBE + TPH (Gas only)

TPH Method 8015B (Gas/Diesel)

TPH (Method 418.1)

EDB (Method 504.1)

8310 (PNA or PAH)

RCRA 8 Metals

Anions (F, Cl, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date: 6-4-09 Time: 16:17 Relinquished by: [Signature]

Date: 6-4-09 Time: 16:01 Relinquished by: Almas Wells

Received by: Almas Wells Date: 6-4-09 Time: 16:17

Received by: [Signature] Date: 6/5/09 Time: 9:20

Remarks:

BTEX only by 8021

Call to BioTech