

**GW - 020**

**MONITORING  
REPORTS**

**DATE:**

**Aug 23, 2005**



**Neal Goates**  
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Risk Management & Remediation  
  
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August 23, 2005

Mr. Wayne Price  
Oil Conservation Division  
New Mexico Energy, Minerals and Natural Resources Department  
1220 South St. Francis Dr.  
Santa Fe, NM 87504

**RE: ANNUAL GROUNDWATER MONITORING AND  
REMEDIATION REPORT  
OCTOBER 2004 THROUGH JULY 2005  
ConocoPhillips Maljamar Gas Plant  
Lea County, New Mexico**

Dear Mr. Price:

Pursuant to our June 14, 2005 meeting in Santa Fe, NM, please find one copy of the above referenced report for your review and concurrence. This report presents a summary of all site activities performed at the Maljamar Gas Plant from October 2004 through July 2005 relating to the remediation and monitoring of groundwater at the site, and presents a proposed path forward for enhancing the remediation of groundwater at the site.

If you have any questions or comments, please contact either myself at the above listed number or Greg Pope with Maxim Technologies at (432) 686-8081.

Sincerely,

 8.22.05

Neal Goates  
Site Manager  
Risk Management and Remediation  
ConocoPhillips

cc: w/ attachment

Suzanne Holland, ConocoPhillips, Houston, TX  
Chris Williams, NMOCD, Hobbs, NM  
Clyde Yancey, Maxim, Albuquerque, NM  
Greg Pope, Maxim, Midland, TX

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## INTRODUCTION

On behalf of ConocoPhillips, Maxim Technologies (Maxim) is submitting the following annual status report for the Maljamar Gas Plant (Site; previously owned by Conoco and later, Frontier Energy, but now owned by Aka Energy as of June 2004). The gas plant is located in Lea County, New Mexico (Sec 21, T17S, R32E; Figure 1). This report includes a brief review of previous site activities and hydrogeologic conditions, groundwater sampling data collected in May 2005, groundwater extraction and aquifer data collected from October 2004 through July 2005 during operation of the groundwater extraction well, and results of a hydrocarbon recovery pilot test conducted at the Site. As part of this report, Maxim also proposes a path forward plan for enhanced recovery of groundwater and hydrocarbons.

## BACKGROUND

During previous investigative and remedial activities at the Maljamar Gas Plant, 12 soil borings were drilled and sampled, 19 groundwater monitoring wells, one (1) groundwater extraction well and two (2) hydrocarbon recovery wells were installed, groundwater samples and water level data were collected, surface and borehole geophysical surveys were performed, an aquifer pump test was conducted, and the groundwater extraction well was operated. The following is a summary of those activities:

- A subsurface investigation was performed in June 2000 to assess the potential for impacts to the subsurface underlying two bermed areas where condensate was historically stored and a 15 barrel condensate release occurred February 13, 2000. The assessment consisted of drilling, collecting and analyzing soil samples from twelve (12)

soil borings. One monitoring well (MW-1) was installed to a depth of 92 feet below ground surface (fbgs). Data collected from this investigation was submitted to the New Mexico Oil Conservation Commission (NMOCD) in the August 8, 2000 Subsurface Investigation Report.

- Two (2) groundwater monitoring wells (MW-2 and 3) were installed at the site in September 2000.
- A groundwater investigation was initiated in May 2001 to define groundwater impacts at the Maljamar Gas Plant. Five (5) monitoring wells were installed (MW-4, 5, 7, 8 and 9). All wells installed during this investigation exhibited the presence of petroleum hydrocarbons. The results of this investigation were submitted to the NMOCD in the July 20, 2001 Interim Investigation Groundwater Report.
- Four (4) groundwater monitoring wells (MW-10, 11, 12 and 13) were installed in December 2001 and one (1) groundwater monitoring well (MW-14) was installed in March 2002 at the site.
- A groundwater investigation was performed in September 2002 to further delineate the groundwater flow system to the north, northeast, east, southeast, south, and southwest of the Maljamar Gas Plant and refine the conceptual hydrogeologic model of the area around the gas plant. Six groundwater monitoring wells (MW-15, 16, 17, 18, 19, and 20) were installed during this investigation. The water level elevations collected during this investigation indicated that a well-defined groundwater mound with a relatively uniform gradient field emanates radially away from a point source toward the north, east, and south. To the west, groundwater was not encountered during the March 2002 drilling program. The results of this investigation were submitted to the NMOCD in the November 11, 2002 Interim Groundwater Investigation Report.
- Condensate recovery wells SK-1 and SK-2 were installed at the site in March and December 2002, respectively.
- A magnetometer survey was performed in January 2003 to locate suspected abandoned exploration wells in the area over the groundwater mound that underlies the Maljamar Gas Plant. An early proposed hypothesis for the groundwater mounding conditions observed at the site was that the water flood of the MCA production unit underlying the area of concern had found a short-circuit upward through an abandoned well or annulus of an existing production well. However, no short-circuit pathways due to an abandoned well were discovered during this survey.
- A borehole geophysical investigation was initiated in March 2003 to ascertain the subsurface stratigraphy to facilitate free condensate removal and any subsequent groundwater remediation efforts. The study indicated mappable units, exhibiting lateral and vertical correlation properties, were underlying the gas plant.
- An aquifer pump test was performed at the site in September 2003 to gather hydrogeologic data from the uppermost saturated zone, exhibiting both condensate and chloride impacts, in order to develop a remediation plan. The data were also used to

develop a water balance for the uppermost aquifer and an interpretive groundwater flow model to aid in estimating the effects of pumping a proposed well to be sited near wells SK-1 and MW-7.

- A groundwater extraction well (MW-6) was installed in the vicinity of wells SK-1, SK-2 and MW-7 on March 31, 2004. Well operation and control equipment was installed during April and May 2004 and groundwater extraction began on May 10, 2004. Water level measurements were collected weekly from May 17, 2004 until September 8, 2004, and continued monthly thereafter.

The results of the aquifer pump test and the magnetometer and borehole geophysical surveys were submitted to the NMOCD in the Comprehensive Groundwater Report, dated March 1, 2004 (Maxim, 2004a). Results of the installation and initial operation of groundwater extraction well MW-6 were submitted to the NMOCD in the Groundwater Extraction Well Report, dated December 9, 2004 (Maxim, 2004b). Table I presents the well construction details for all the monitoring and remediation wells installed at the Site.

## SITE HYDROGEOLOGY SUMMARY

A detailed conceptual model of the hydrogeologic conditions existing at the Site is presented in the Comprehensive Groundwater Report (Maxim, 2004a). Previous groundwater investigations and sampling performed at the Site have revealed that groundwater occurs under confining conditions in the vicinity of the Site at approximately 70 to 95 fbsgs within two sand units ranging in thickness from several feet to no more than 10 to 12 feet thick. Figure 2 shows the northwest to southeast transect of a conceptual cross section prepared for the Site. Figure 3 is included as a conceptual cross section depicting the subsurface conditions present at the Site. At a depth of approximately 72 fbsgs in the vicinity of wells SK-1 and MW-7 (Figures 2 and 3), an 11-foot-thick upper water-bearing sandstone layer overlies a 4-foot-thick shale layer, which in turn overlies a lower 13-foot-thick water-bearing sandstone layer. Generally, the overlying deposits consist of approximately 60 feet of light colored sands and sandy silts with occasional caliche interbeds, shale stringers and intermittent gravels representative of the Quaternary age alluvium/bolson fill which are underlain by approximately 30 to 50 feet of green to grayish green to dark green silty shales of the Triassic age Chinle Shale. The Tertiary age Ogallala Formation outcrops in a prominent escarpment (Mescalero Ridge) approximately four miles to the northeast of the Site, where the Ogallala unconformably overlies the Chinle shales. The overlying interbedded shale units presumably confine the groundwater contained in the underlying water-bearing sandstone units. A borehole geophysics investigation conducted at the Site in March 2003 (Maxim, 2004a) indicated that the subsurface stratigraphy is complex, consisting of irregular, interbedded sands, shales and silts deposited on an erosional surface.

Previous groundwater investigations and monitoring events have revealed that the groundwater potentiometric surface in the immediate vicinity of the Site is mounded, with the center of the mound occurring northwest of the Site. In exploration borings completed approximately 1000 feet west, northwest, and southwest of the mound centroid, no sand interval was encountered indicating the mound is truncated toward the west, which is most likely due to a subsurface stratigraphic pinch-out or fault (Figure 3). To the north, south and east of the mound centroid, groundwater occurs under unconfined conditions, demonstrating that further away from the mound recharge zone, confining pressures diminish (Maxim, 2004a).

## FIELD METHODOLOGY

Field activities conducted at the Maljamar Gas Plant from October 2004 through July 2005 included performing a round of groundwater sampling and analyses in May 2005; collecting monthly groundwater level and periodic water quality data during the operation of extraction well MW-6; and performing a hydrocarbon recovery pilot test on May 19 and 20, 2005.

### Groundwater Monitoring And Sampling

Groundwater samples were collected from the Maljamar Gas Plant monitoring wells on May 11 - 13, 2005. Prior to sampling, 22 wells were sounded for groundwater levels and affected wells were also measured for hydrocarbon thickness. Table 2 presents the groundwater level and hydrocarbon thickness measurement data for the Site. Fourteen (14) groundwater monitoring wells, one (1) groundwater extraction well, and one onsite water well were sampled during this event. Wells exhibiting measurable levels of hydrocarbons were not sampled. The groundwater samples were collected into appropriate sample containers, placed in a cooler packed with ice, and shipped under chain-of-custody to an approved laboratory for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Method 8260; semi-volatile compounds-polynuclear aromatic hydrocarbons (PAHs) by Method 8270; calcium, magnesium, sodium and potassium by Method 6010B; chloride and sulfate by Method 300.0A; total dissolved solids (TDS) by Method 160.1; and alkalinity (carbonate, bicarbonate and total) by Method 310.1. One duplicate sample, collected from monitoring well MW-8, was also submitted to the laboratory for analysis.

A groundwater sample was collected from extraction well MW-6 on April 5, 2005 and submitted for laboratory analyses of BTEX by Method 8260; calcium, magnesium, sodium and potassium by Method 6010B; chloride and sulfate by Method 300.0A; TDS by Method 160.1; and alkalinity (carbonate, bicarbonate and total) by Method 310.1. Summaries of the laboratory analytical results from the April 2005 sampling of MW-6 and the May 2005 groundwater monitoring event are presented in Table 3a and 3b, respectively. The laboratory analytical data is included in Appendix A.

### **Groundwater Level and Water Quality Data Collection**

Monthly groundwater level measurements were recorded from each of the monitoring wells at the Site from October 2004 to July 2005. Groundwater depths were measured using an electronic interface probe capable of detecting both the top of the hydrocarbons, if present, and the hydrocarbon/water interface. The probe was cleaned before and after each use in each monitoring well. Groundwater measurements proceeded from the cleanest wells to the wells containing hydrocarbons. At each monitoring well, the water level and hydrocarbon depth, if present, were measured from the top of casing. The depth of groundwater below the top of casing was subtracted from the elevation of the top of casing to give the elevation of the groundwater at each well. The elevation of hydrocarbons was also determined in this manner at the affected wells, and the hydrocarbon thickness was calculated by subtracting the hydrocarbon depth from the groundwater depth. Groundwater and hydrocarbon depth measurements and elevations are summarized in Table 2.

Groundwater quality measurements of the MW-6 discharge water were collected periodically from October 2004 to July 2005 using a portable field instrument. Measurement parameters included specific conductivity, salinity, pH and temperature. Table 4 presents the groundwater quality measurement data for MW-6.

### **Groundwater Extraction Well Operation**

Groundwater extraction well MW-6 was operated continuously from October 2004 through July 2005. Extracted groundwater was pumped from the well into an onsite 210-barrel (bbl) fluid storage tank. ConocoPhillips personnel initially performed routine gauging of the onsite fluid storage tank and disposed of the collected fluids by injecting the tank contents into the ConocoPhillips' MCA Station water flood system. Subsequently, the fluid storage tank was fitted with automated tank gauging and pumping controls for automatically injecting the tank contents into MCA Station water flood system. Since initial startup on May 10, 2004 to July 5, 2005, approximately 335,956 gallons of groundwater have been extracted from MW-6. Table 5 presents a summary of the groundwater extraction well recovery volumes.

### **Hydrocarbon Recovery Pilot Test**

A hydrocarbon recovery pilot test was performed at the Site on May 19 and 20, 2005. Groundwater extraction well MW-6 was shut down and the tops of groundwater and hydrocarbon were measured in wells MW-7, SK-1 and SK-2 prior to the start of the test on May 19, 2005. Table 6 presents the pilot test groundwater and hydrocarbon level measurements. SK-1 was recorded with an initial liquid-phase hydrocarbon (LPH) thickness of 7.67 feet prior to the test. The LPH layer was bailed out of SK-1 and groundwater and

hydrocarbon levels were measured in wells MW-7, SK-1 and SK-2 during recovery. On May 20, 2005, the pilot test procedure was repeated where the LPH layer was bailed off of MW-7 and wells MW-7, SK-1 and SK-2 were again measured during recovery. MW-7 was recorded with an initial LPH thickness of 3.10 feet prior to the test. Extraction well MW-6 was restarted after completion of the pilot test.

## GROUNDWATER DATA ANALYSIS

The following sections provide a discussion of the groundwater data collected at the Maljamar Gas Plant from October 2004 to July 2005.

### Groundwater Data Evaluation

Monthly groundwater and hydrocarbon level measurements were collected at the Site from October 2004 to July 2005, and are summarized in Table 2. Groundwater potentiometric surface maps for October 2004, and January, March, May and July 2005 are included as Figures 4a, 4b, 4c, 4d, and 4e, respectively. These potentiometric data show little variation in the mound geometry during this time period with groundwater elevations ranging from approximately 3,930 feet above mean sea level (famsl) in the mound centroid to approximately 3,900 famsl in the outlying wells located south and east of the Site. The hydraulic gradient at the Site was calculated from this data set to be between 0.0109 and 0.0066 feet per foot, and the hydraulic gradient is shown to decrease radially from the approximate center of the mound in all directions except to the west.

Hydrocarbon thickness isopleth maps for October 2004, and January, March, May and July 2005 are included as Figures 5a, 5b, 5c, 5d, and 5e, respectively. As shown on the figures, the hydrocarbon thickness in the affected wells has remained fairly constant. Effects of the pumping at extraction well MW-6 may be evident in the area of MW-7, SK-1 and SK-2, where an overall decrease in the hydrocarbon thickness was noted from October 2004 to July 2005. Well MW-5 also showed an overall decrease in hydrocarbon thickness from 0.16 feet in October 2004 to none being measurable in May and July 2005. Well MW-8 recorded a hydrocarbon thickness of 0.04 feet in July 2005 while none was measurable during the previous events.

### Groundwater Quality Evaluation

Groundwater analytical results are presented in Tables 3a and 3b, and a figure depicting the groundwater analytical results for the May 2005 sampling event is included as Figure 6. The laboratory analytical data is included in Appendix A. The groundwater sample collected from extraction well MW-6 on April 5, 2005 reported concentrations of benzene, chloride and TDS

above New Mexico Water Quality Control Commission (WQCC) standards at 4.7 milligrams per liter (mg/L), 421 mg/L and 1,350 mg/L, respectively (Table 3a).

The May 2005 groundwater samples reported detectable concentrations of organic compounds in six (6) of the wells sampled (Table 3b; Figure 6). Wells MW-2, MW-6 and MW-8 reported the only concentrations of organic constituents above WQCC standards with benzene reported at 51, 4.8 and 22 mg/L, respectively, and toluene reported at 13 mg/L in MW-2 and 1.9 mg/L in MW-8.

Inorganic constituents were reported above WQCC standards in 14 of the 16 wells sampled (Table 3b). Well MW-12 reported the highest concentrations of inorganic constituents with 64,200 mg/L of chloride, 1,590 mg/L of sulfate, and 118,000 mg/L of TDS. This well also reported the highest concentrations of major cations with 5,140 mg/L of calcium, 1,480 mg/L of magnesium, 142 mg/L of potassium, and 30,100 mg/L of sodium. Chloride concentration isopleths for the May 2005 groundwater data are shown on Figure 7. Alkalinity analysis reported that only bicarbonate alkalinity is present in the site groundwater. Considering the general minerals content of wells outside the area of elevated chloride concentrations, the groundwater is generally calcium bicarbonate in nature.

Groundwater quality parameters for specific conductivity, pH, salinity and temperature collected of the discharge water from extraction well MW-6 are summarized in Table 4. These measurements indicate a slightly alkaline saline water with a pH of 7.14 to 8.69 and a specific conductivity of approximately 1.45 to 2.08 millSiemens per centimeter is present in this well.

#### **Hydrocarbon Recovery Pilot Test Results**

Groundwater and hydrocarbon measurements collected during the hydrocarbon recovery pilot test are shown in Table 6 and graphs of these data are included in Appendix B. Results of the pilot test performed at SK-1 on May 19, 2005 indicated a slow recovery of hydrocarbon thickness compared to the initial pre-test measurement. SK-1 was initially measured with a hydrocarbon thickness of 7.67 feet and was bailed down to a thickness of 0.56 feet for the recovery test. Hydrocarbon thickness recovered to 1.24 feet (0.68 feet) in the well within 5 minutes after bailing stopped, but then only recovered 0.14 feet in the next 2.5 hours and only 0.48 feet in 17 hours 50 minutes. Well SK-2 responded to the hydrocarbon bailing at SK-1 by reducing its hydrocarbon thickness from an initial measurement of 2.39 feet to 0.52 feet. The hydrocarbon thickness in well MW-7 increased during the bailing at SK-1 from 3.18 feet to 3.33 feet.

Response to the hydrocarbon recovery pilot test performed at MW-7 on May 20, 2005 showed comparable results. MW-7 was initially measured with a hydrocarbon thickness of 3.10 feet

and was bailed down to a thickness of 0.69 feet. Hydrocarbon thickness recovered to 0.85 feet (0.16 feet) within 5 minutes after bailing stopped, but the only recovered 0.25 feet over the next 1 hour 20 minutes. Wells SK-1 and SK-2 showed no response to the bailing at MW-7.

Given these recovery results, an appreciable amount of LPH could be removed from well SK-1 by utilizing a free-floating skimmer pump with a cyclic discharge interval. Analysis of the SK-1 recovery data show that 0.4 gallons of hydrocarbons may be extracted every 5 minutes, giving a volume of approximately 115 gallons of LPH removed over a 24-hour period. However, actual LPH recovery rates may fluctuate based on the response to groundwater pumping at MW-6.

## PROPOSED PATH FORWARD

Based on the data, results and evaluations presented in this report, Maxim proposes the following path forward tasks:

- Continue operation of groundwater extraction well MW-6 and periodically collect groundwater quality and extraction volume data. The maintenance of the pump system, monitoring of the storage tank levels, and transfer and disposal of fluids will continue to be coordinated through ConocoPhillips' MCA Business Unit.
- Continue to collect monthly groundwater level and hydrocarbon thickness data from the Site monitoring wells.
- Continue annual groundwater monitoring and sampling of the Site monitoring wells. Groundwater samples will be collected and submitted to an analytical laboratory for analyses of volatile organic compounds, semi-volatile organic compounds, major ions, total dissolved solids, and chloride.
- Install a LPH skimmer system in well SK-1 and inject the extracted hydrocarbons into the existing groundwater extraction piping. Extracted hydrocarbons will be skimmed at the ConocoPhillips' MCA water flood station and recovered at the Battery A2 production unit. The skimmer system will include a separate volume totalizer for measuring the amount of LPH being extracted.
- Conduct a hydrocarbon extraction and recovery pilot test at well MW-9 to determine the feasibility of operating a skimmer system in this well to remove accumulated hydrocarbons and install the skimmer system upon completion of the pilot test.
- Install a groundwater extraction well in the vicinity of monitoring well MW-12 to similar specifications as groundwater extraction well MW-6. The new extraction well will be used to contain and extract the elevated TDS and chloride constituents reported in the groundwater at MW-12. The new six-inch diameter groundwater extraction well will be screened across both groundwater-bearing sandstone units, and drilled a few feet below the base of the lowermost aquifer sandstone, creating a sump to allow for

additional drawdown during pumping. Design of the well shall include a low water level cutoff switch to prevent pump damage should drawdown approach the pump intake depth, and a corresponding high water level switch to restart the pump when the groundwater levels have recovered. The pumping system design will also include a flow meter to accurately gauge the amount of fluids pumped from the well. Actual boring depth, length of screened interval and well completion parameters will be based on conditions observed in the field during drilling. Groundwater pumped from the well will be transferred to the MCA Station water flood system for re-injection. The maintenance of the pump system, and transport and disposal of fluids will be coordinated through ConocoPhillips' MCA Business Unit for assistance and oversight. Groundwater quality and extraction volume data will be periodically collected at the new well.

## REFERENCES

Maxim Technologies, Inc. (2004a) report entitled "Comprehensive Groundwater Report, Maljamar Gas Plant, Maljamar, New Mexico" to Mr. Wayne Price, New Mexico Oil Conservation Division, dated March 1, 2004.

Maxim Technologies, Inc. (2004b) report entitled "Groundwater Extraction Well Report, Maljamar Gas Plant, Maljamar, New Mexico" to Mr. Neal Goates, ConocoPhillips, dated October 22, 2004.

Should you have any questions or comments upon review of this report, please contact Greg W. Pope at (432) 686-8081.

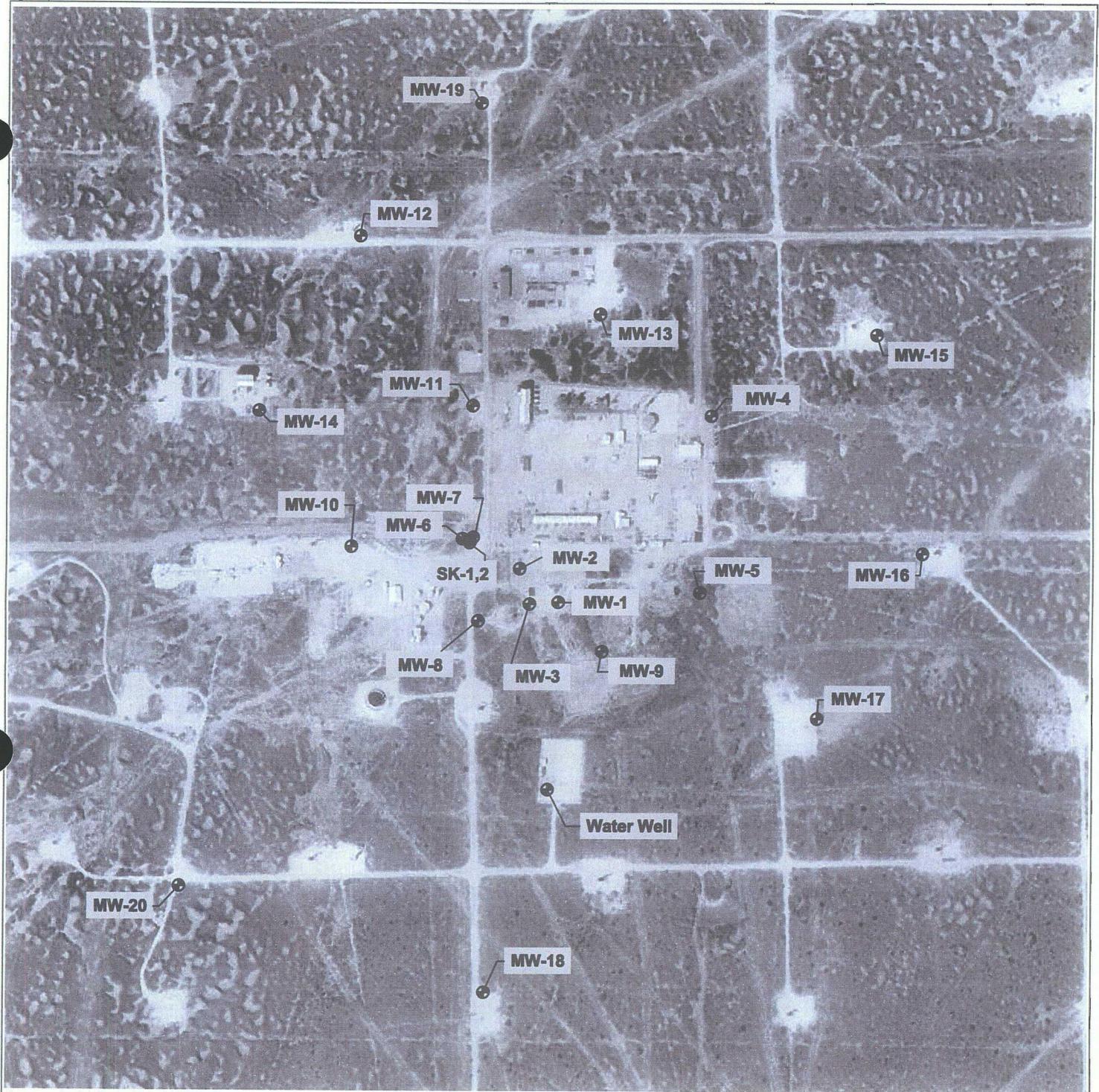
Sincerely,  
**MAXIM TECHNOLOGIES, INC.**



Greg W. Pope  
Hydrogeologist

# **FIGURES**

- Figure 1** Monitoring Well Locations
- Figure 2** Cross Section Transect
- Figure 3** Conceptual Cross Section
- Figure 4a** Groundwater Elevation Contour Map – October 8, 2004
- Figure 4b** Groundwater Elevation Contour Map – January 17, 2005
- Figure 4c** Groundwater Elevation Contour Map – March 9, 2005
- Figure 4d** Groundwater Elevation Contour Map – May 10, 2005
- Figure 4e** Groundwater Elevation Contour Map – July 5, 2005
- Figure 5a** Liquid Phase Hydrocarbon (LPH) Thickness Contour Map – October 8, 2004
- Figure 5b** Liquid Phase Hydrocarbon (LPH) Thickness Contour Map – January 17, 2005
- Figure 5c** Liquid Phase Hydrocarbon (LPH) Thickness Contour Map – March 9, 2005
- Figure 5d** Liquid Phase Hydrocarbon (LPH) Thickness Contour Map – May 10, 2005
- Figure 5e** Liquid Phase Hydrocarbon (LPH) Thickness Contour Map – July 5, 2005
- Figure 6** Summary of Groundwater Analytical Results – May 10, 2005
- Figure 7** Chloride Concentration Isopleth Map – May 10, 2005



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

- MW-18**  
● Monitoring Well Location

0 600 1200  
SCALE (feet)



**FIGURE 1** MALJAMAR GAS PLANT MONITORING WELL LOCATIONS

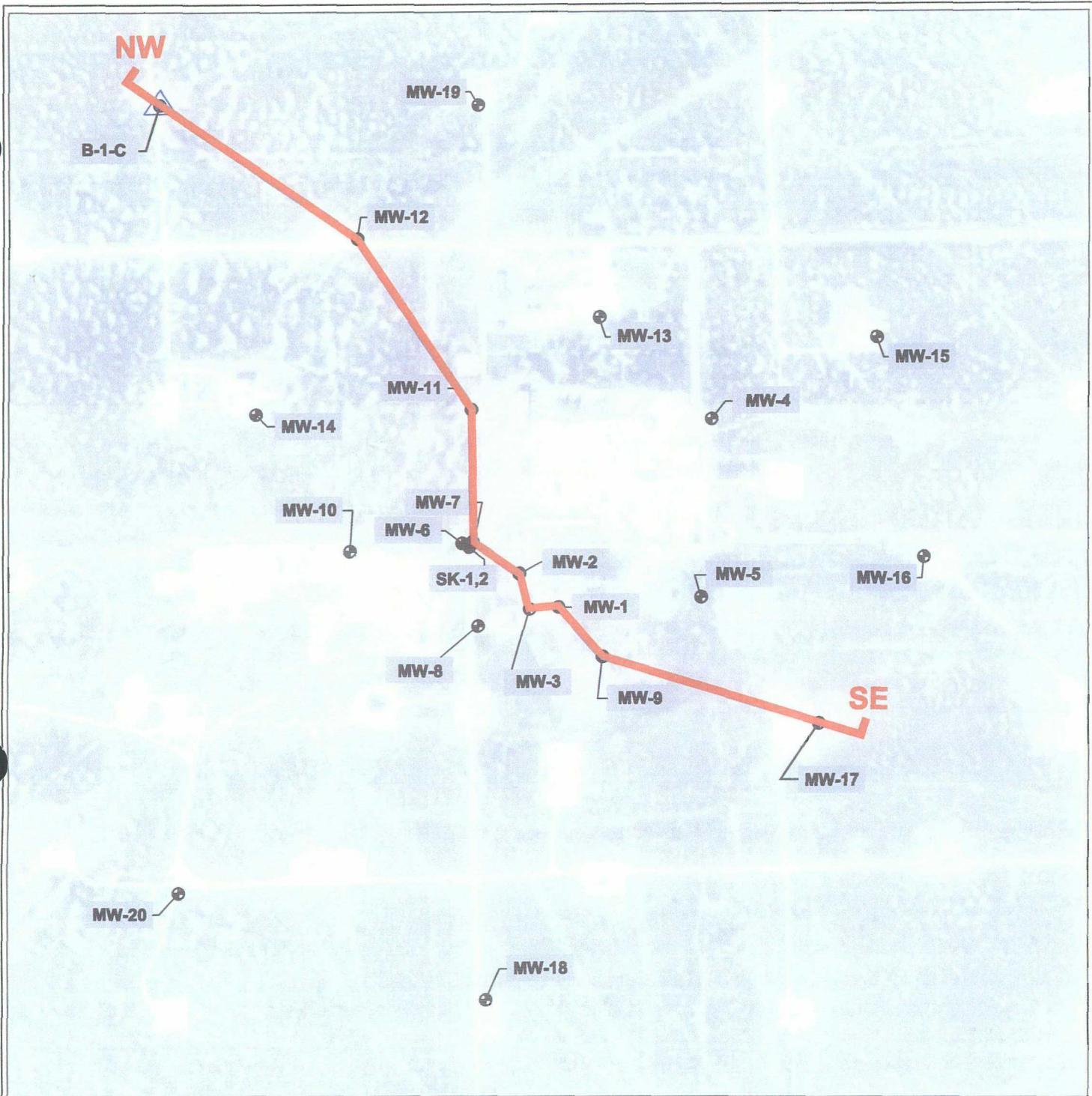
**ConocoPhillips**

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LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

PROJECT NO. 5640004  
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DRAWING DATE: 08/08/2005

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**FIGURE 2** MALJAMAR GAS PLANT CROSS SECTION TRANSECT

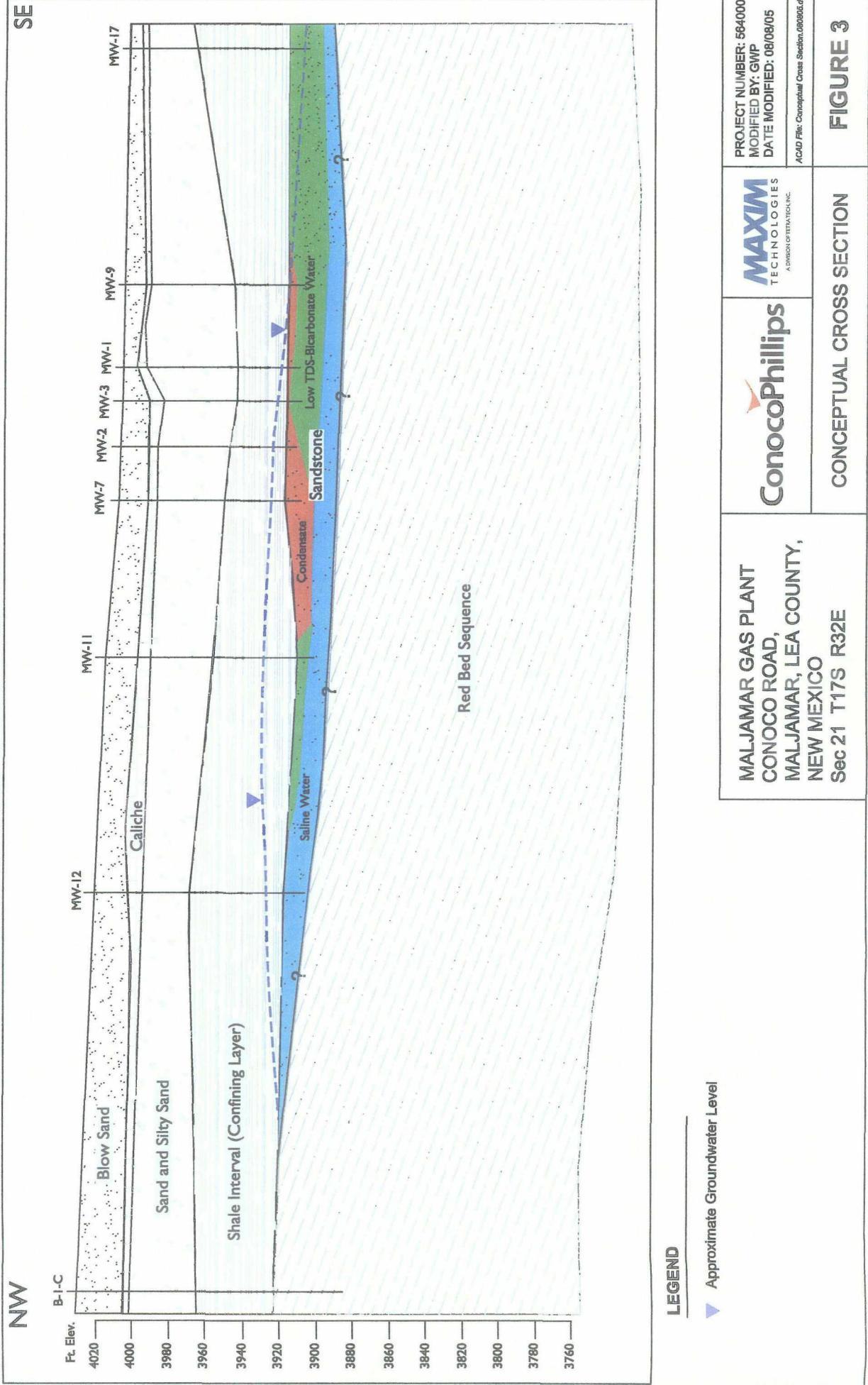
**ConocoPhillips**

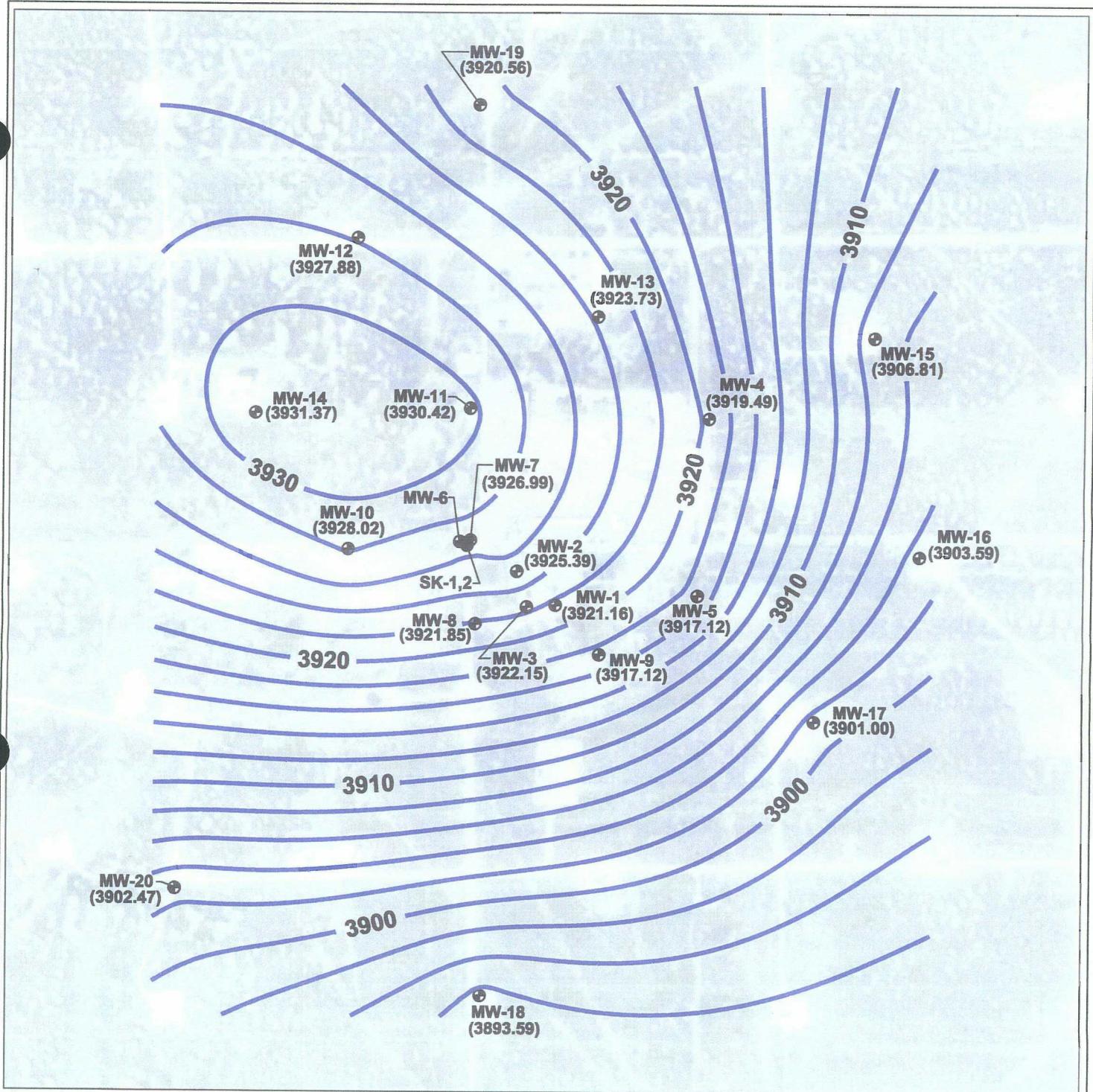
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NEW MEXICO  
Sec 21 T17S R32E

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DRAWING BY: GWP  
DRAWING DATE: 08/08/2005

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#### LEGEND



Monitoring Well Location

(3901.00)

Groundwater Elevation (feet MSL)



3930

Groundwater Elevation Contour

0 600 1200  
SCALE (feet)



FIGURE  
4a

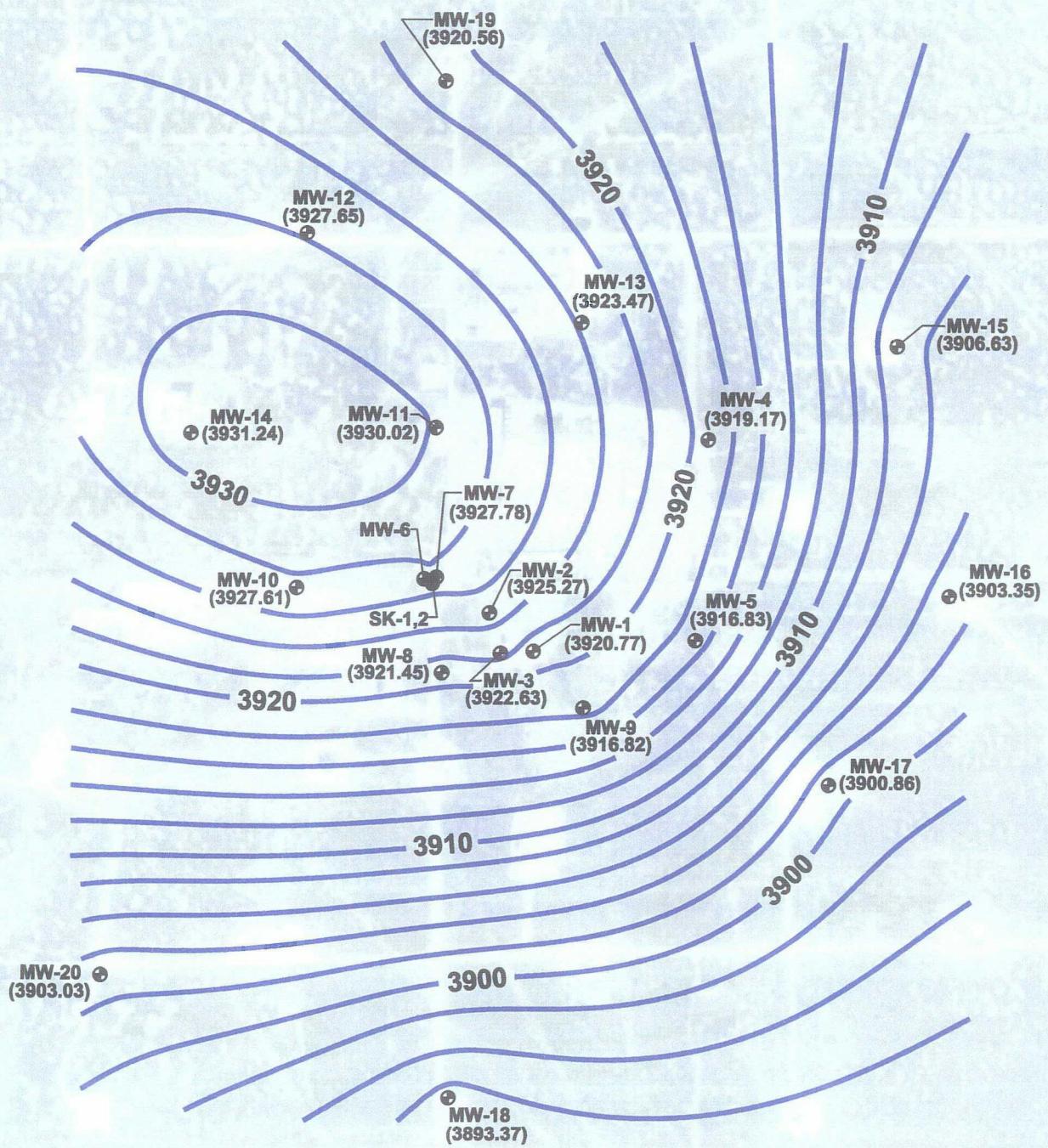
MALJAMAR GAS PLANT  
GROUNDWATER ELEVATION  
CONTOUR MAP  
OCTOBER 8, 2004

**ConocoPhillips**

**MAXIM**  
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LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

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DRAWING DATE: 08/04/2005  
ACAD File: Maljamar.GW Elev Contours.100804.dwg



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#### LEGEND

- Monitoring Well Location
- (3900.86) Groundwater Elevation (feet MSL)
- Groundwater Elevation Contour



FIGURE  
4b  
MALJAMAR GAS PLANT  
GROUNDWATER ELEVATION  
CONTOUR MAP  
JANUARY 17, 2005

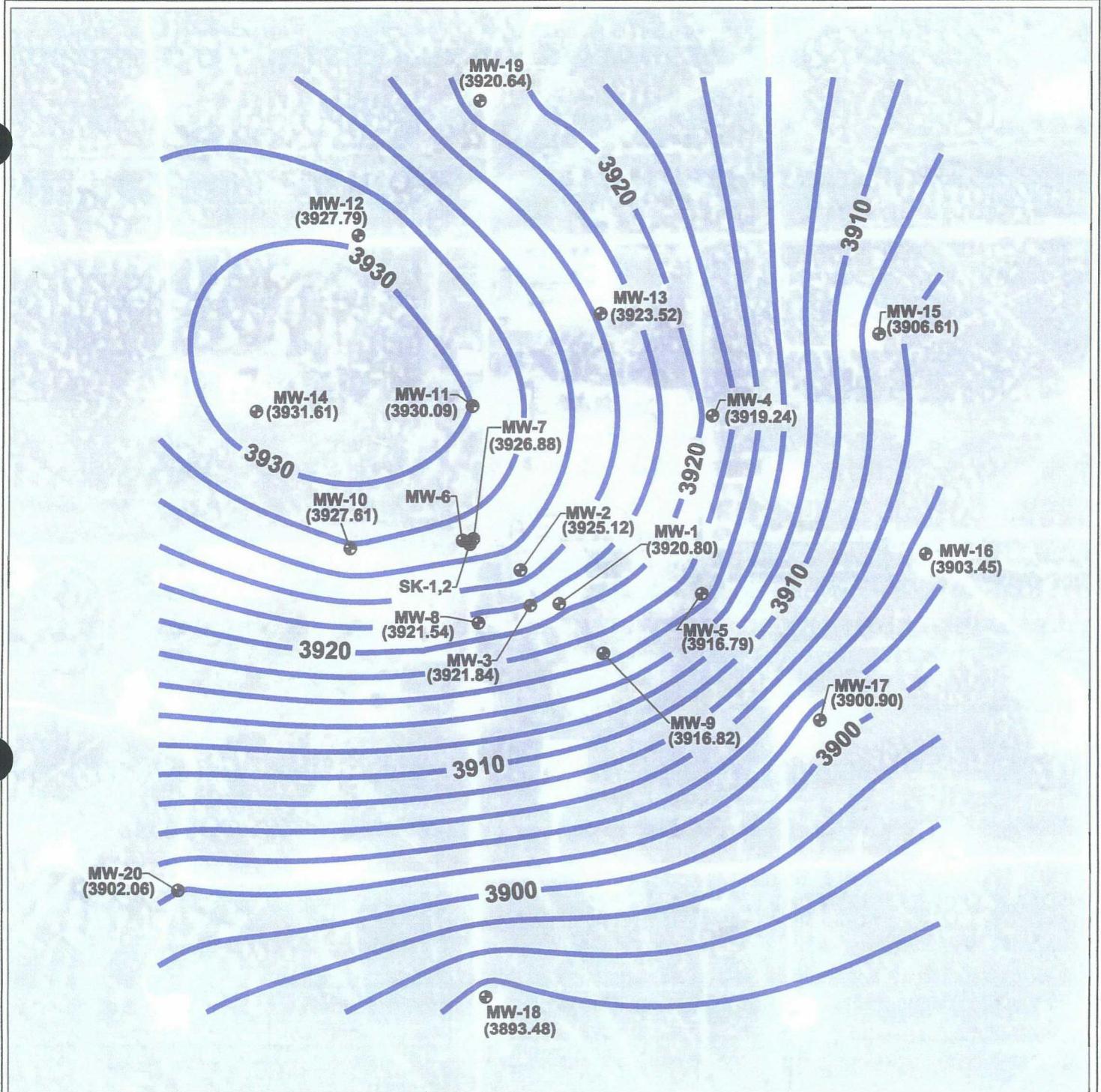
ConocoPhillips

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

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ACAD File: Maljamar.GW Elev Contours.011705.dwg



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#### LEGEND

Monitoring Well Location

(3900.90) Groundwater Elevation (feet MSL)

Groundwater Elevation Contour

0 600 1200  
SCALE (feet)



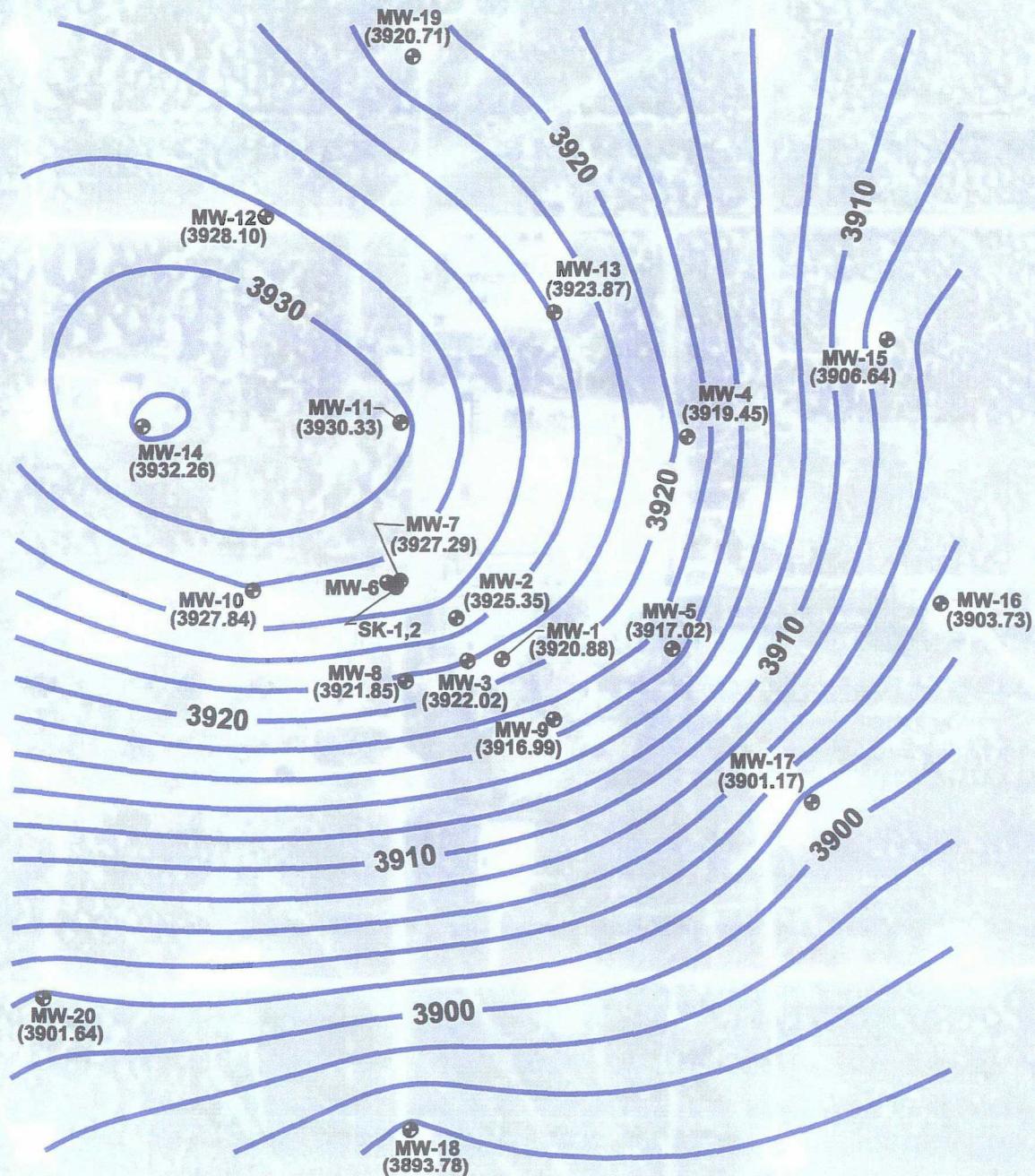
FIGURE  
4c  
MALJAMAR GAS PLANT  
GROUNDWATER ELEVATION  
CONTOUR MAP  
MARCH 9, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

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ACAD File: Maljamar.GW Elev Contours.030905.dwg



#### LEGEND

- MW-18 Monitoring Well Location
- (3901.17) Groundwater Elevation (feet MSL)
- 3930 Groundwater Elevation Contour

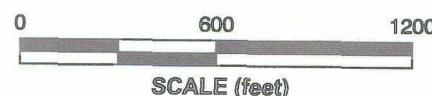


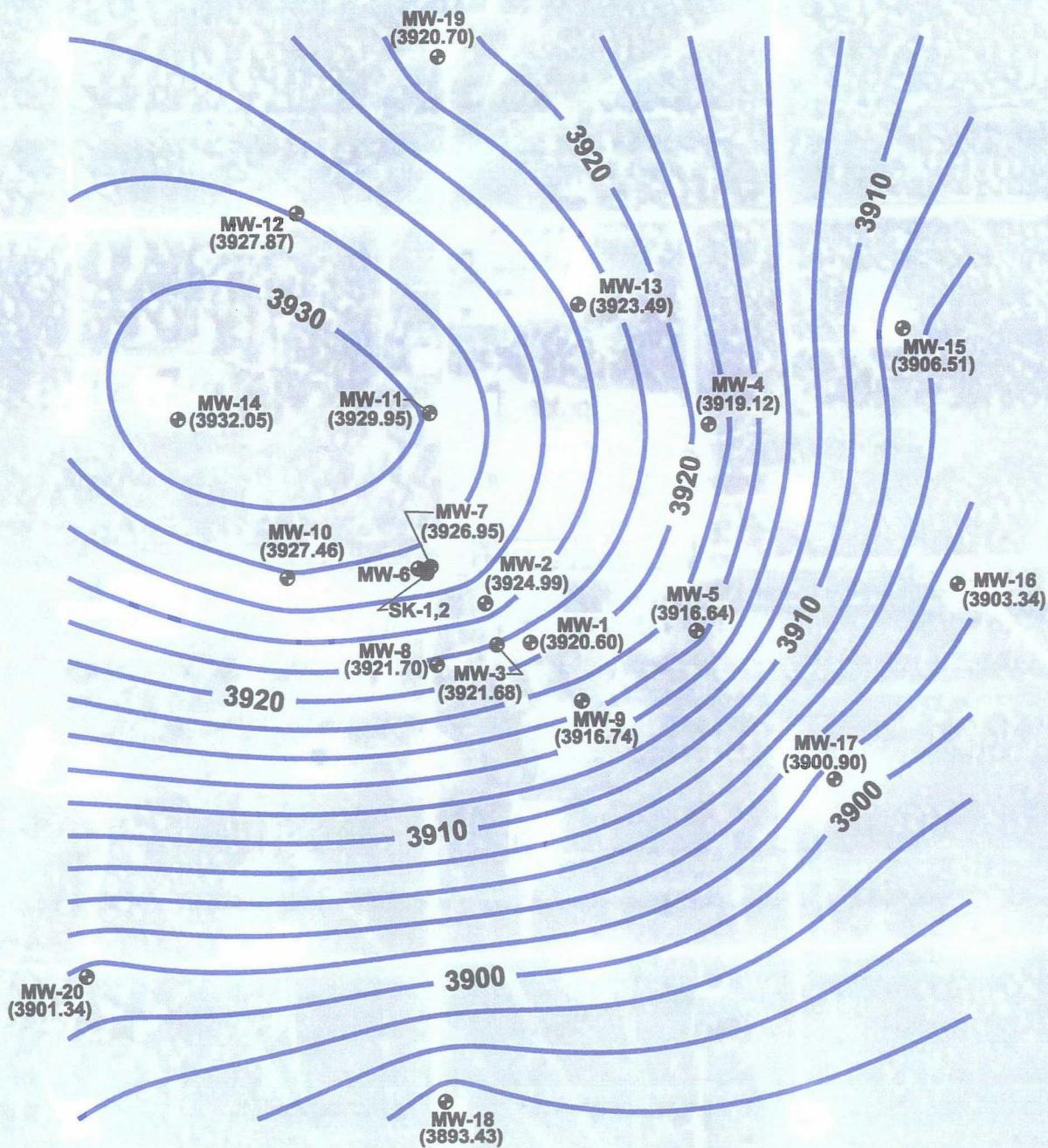
FIGURE  
4d  
MALJAMAR GAS PLANT  
GROUNDWATER ELEVATION  
CONTOUR MAP  
MAY 10, 2005

ConocoPhillips

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ACAD File: Maljamar.GW Elev.051005.dwg



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#### LEGEND

Monitoring Well Location

(3900.90) Groundwater Elevation (feet MSL)

Groundwater Elevation Contour

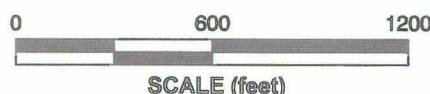
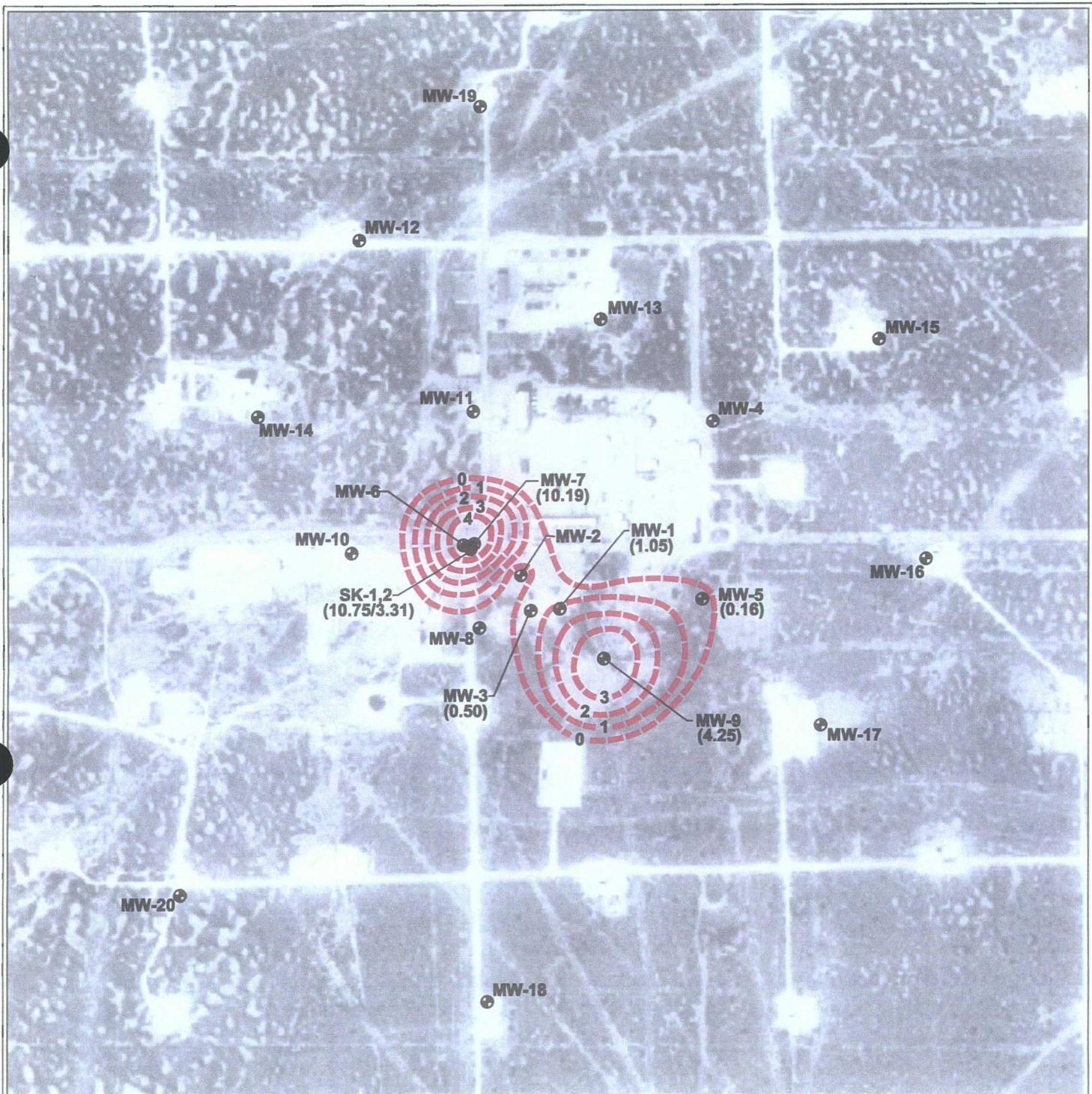


FIGURE  
4e  
MALJAMAR GAS PLANT  
GROUNDWATER ELEVATION  
CONTOUR MAP  
JULY 5, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

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#### LEGEND

Monitoring Well Location

LPH Thickness Contour

(4.25) LPH Thickness (feet)



FIGURE  
5a

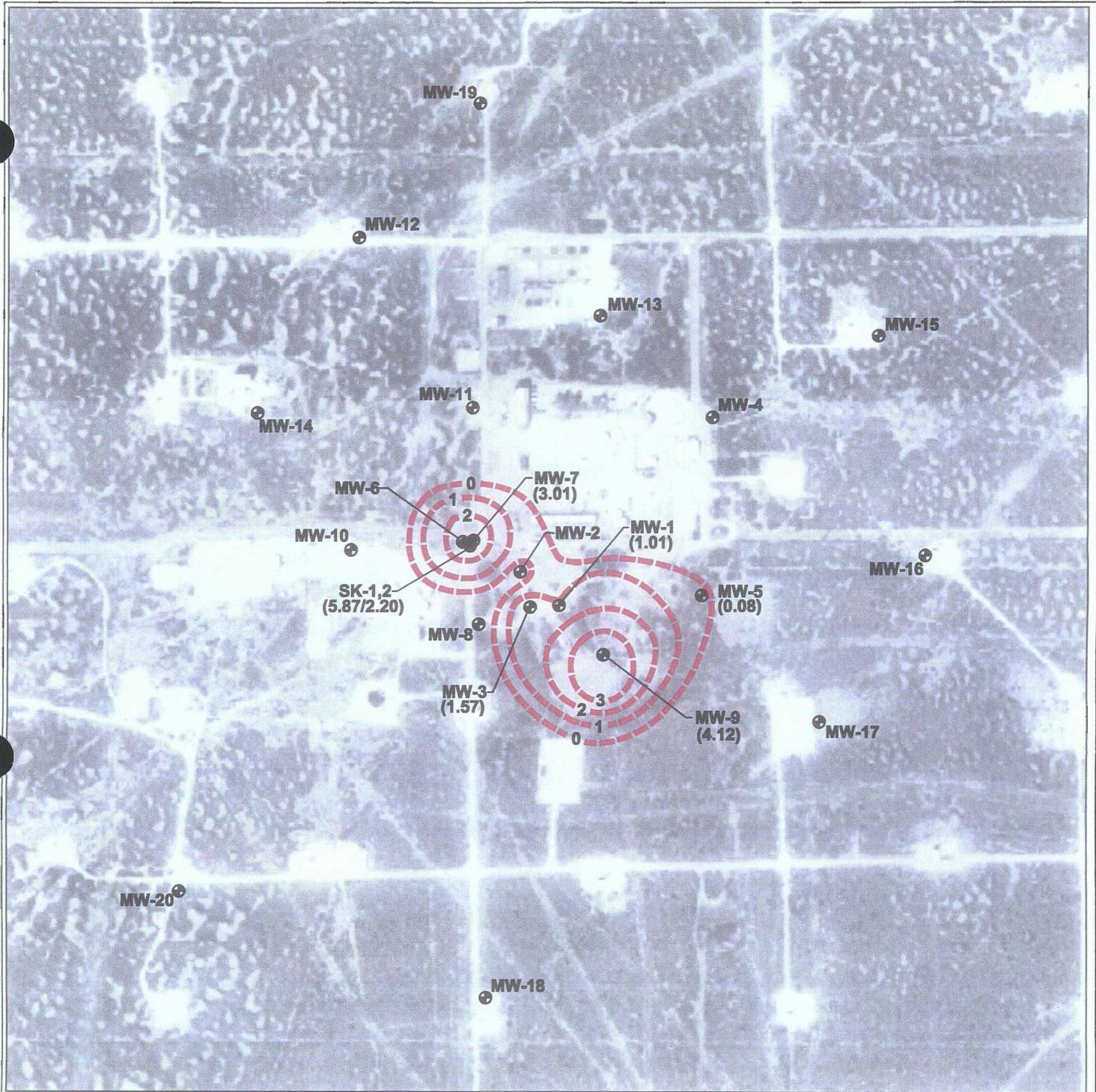
MALJAMAR GAS PLANT  
LIQUID PHASE HYDROCARBON  
(LPH) THICKNESS CONTOUR MAP  
OCTOBER 8, 2004

**MAXIM**  
TECHNOLOGIES  
A DIVISION OF TETRA TECH, INC.

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/04/2005

ACAD File: Maljamar.LPHMap.100805.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

Monitoring Well Location

LPH Thickness Contour

(4.12) LPH Thickness (feet)

0 600 1200  
SCALE (feet)



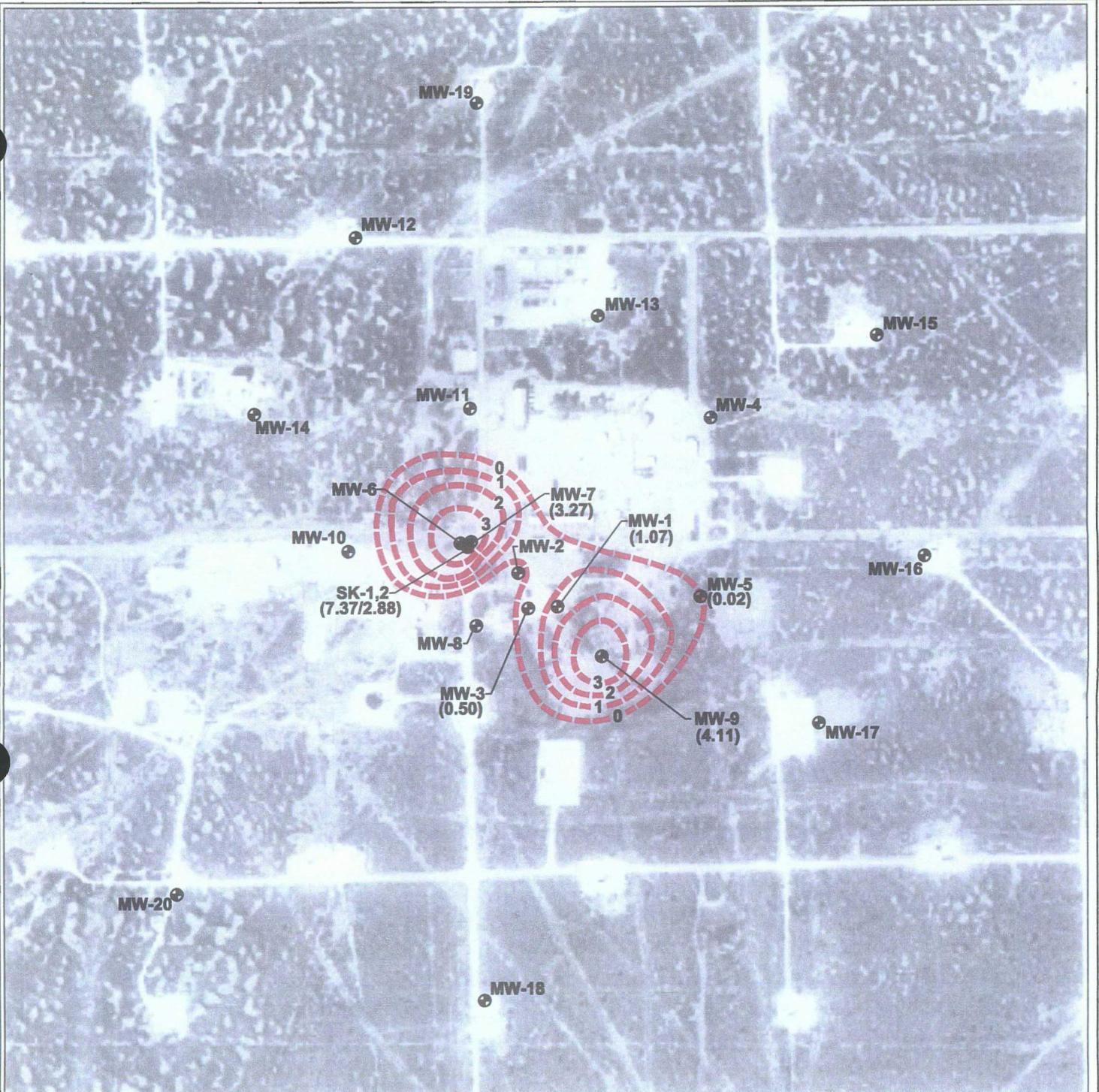
FIGURE  
5b MALJAMAR GAS PLANT  
LIQUID PHASE HYDROCARBON  
(LPH) THICKNESS CONTOUR MAP  
JANUARY 17, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

**MAXIM**  
TECHNOLOGIES  
A DIVISION OF TETRA TECH, INC.

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/04/2005

ACAD File: Maljamer.LPHMap.011705.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

Monitoring Well Location

LPH Thickness Contour

(4.11) LPH Thickness (feet)

0 600 1200  
SCALE (feet)



FIGURE  
5c  
MALJAMAR GAS PLANT  
LIQUID PHASE HYDROCARBON  
(LPH) THICKNESS CONTOUR MAP  
MARCH 9, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

MAXIM  
TECHNOLOGIES  
A DIVISION OF TETRA TECH, INC.

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/04/2005

ACAD File: Maljamar.LPHMap.030905.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS TerraServer

#### LEGEND

Monitoring Well Location

LPH Thickness Contour

(4.13) LPH Thickness (feet)

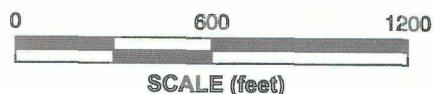


FIGURE  
5d  
MALJAMAR GAS PLANT  
LIQUID PHASE HYDROCARBON  
(LPH) THICKNESS CONTOUR MAP  
MAY 10, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

MAXIM  
TECHNOLOGIES  
A DIVISION OF TETRA TECH, INC.

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/04/2005

ACAD File: Maljamar.LPHMap.051005.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

- MW-18 Monitoring Well Location
- 3 LPH Thickness Contour
- (4.19) LPH Thickness (feet)

0 600 1200

SCALE (feet)



FIGURE  
5e

MALJAMAR GAS PLANT  
LIQUID PHASE HYDROCARBON  
(LPH) THICKNESS CONTOUR MAP  
JULY 5, 2005

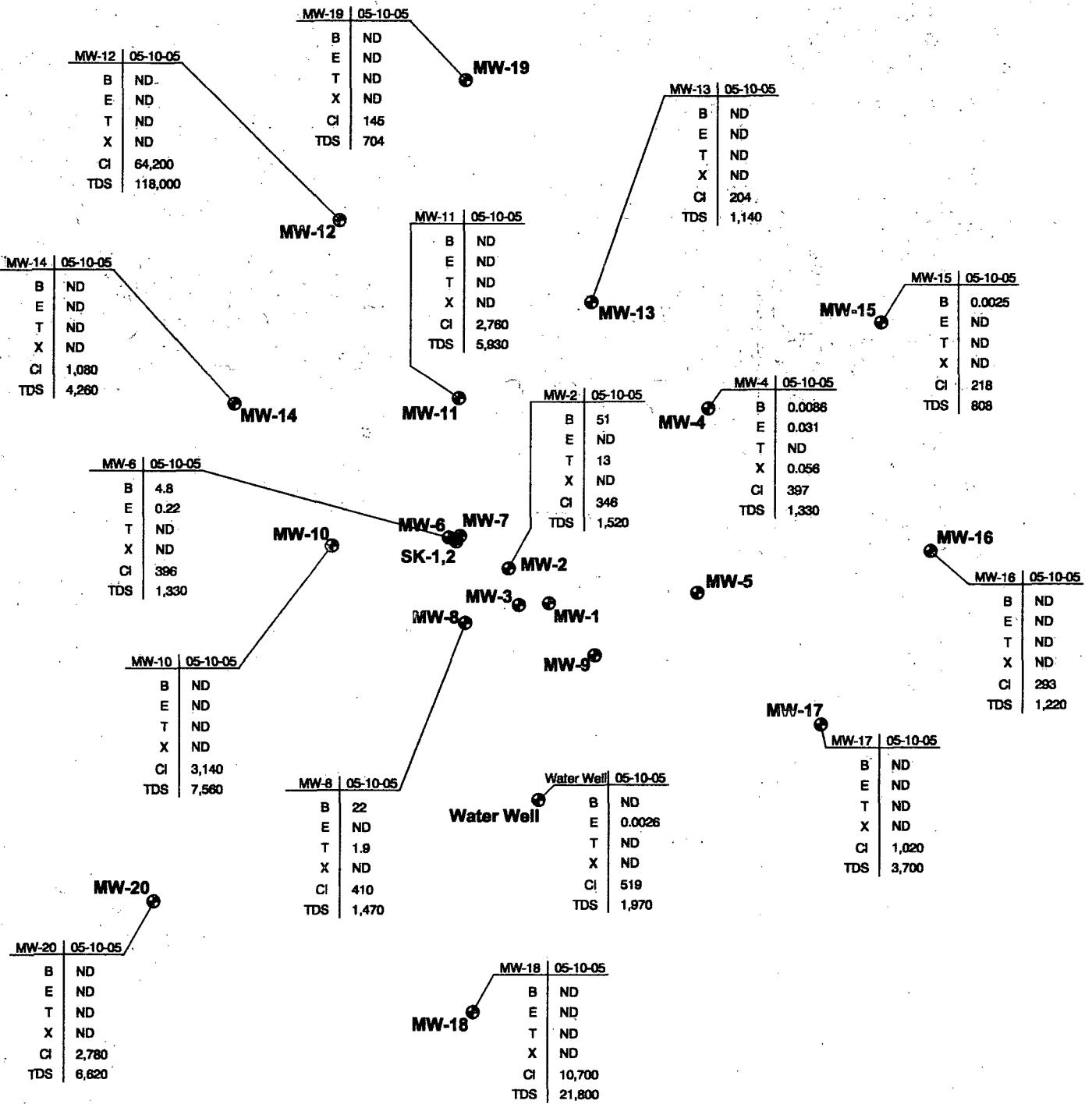
**ConocoPhillips**

**MAXIM**  
TECHNOLOGIES  
A DIVISION OF TETRATECH, INC.

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/04/2005

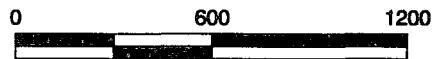
ACAD File: Maljamar.LPHMap.070505.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

MW-18     Monitoring Well Location



#### ANALYTICAL DATA

Well Number	Sample Date
B	Benzene
E	Ethylbenzene
T	Toluene
X	Xylenes (Total)
Cl	Chloride
TDS	Total Dissolved Solids

Results in milligrams per liter

ND = Not detected at or above laboratory detection limits

FIGURE  
6

MALJAMAR GAS PLANT  
SUMMARY OF GROUNDWATER  
ANALYTICAL RESULTS  
MAY 10, 2005

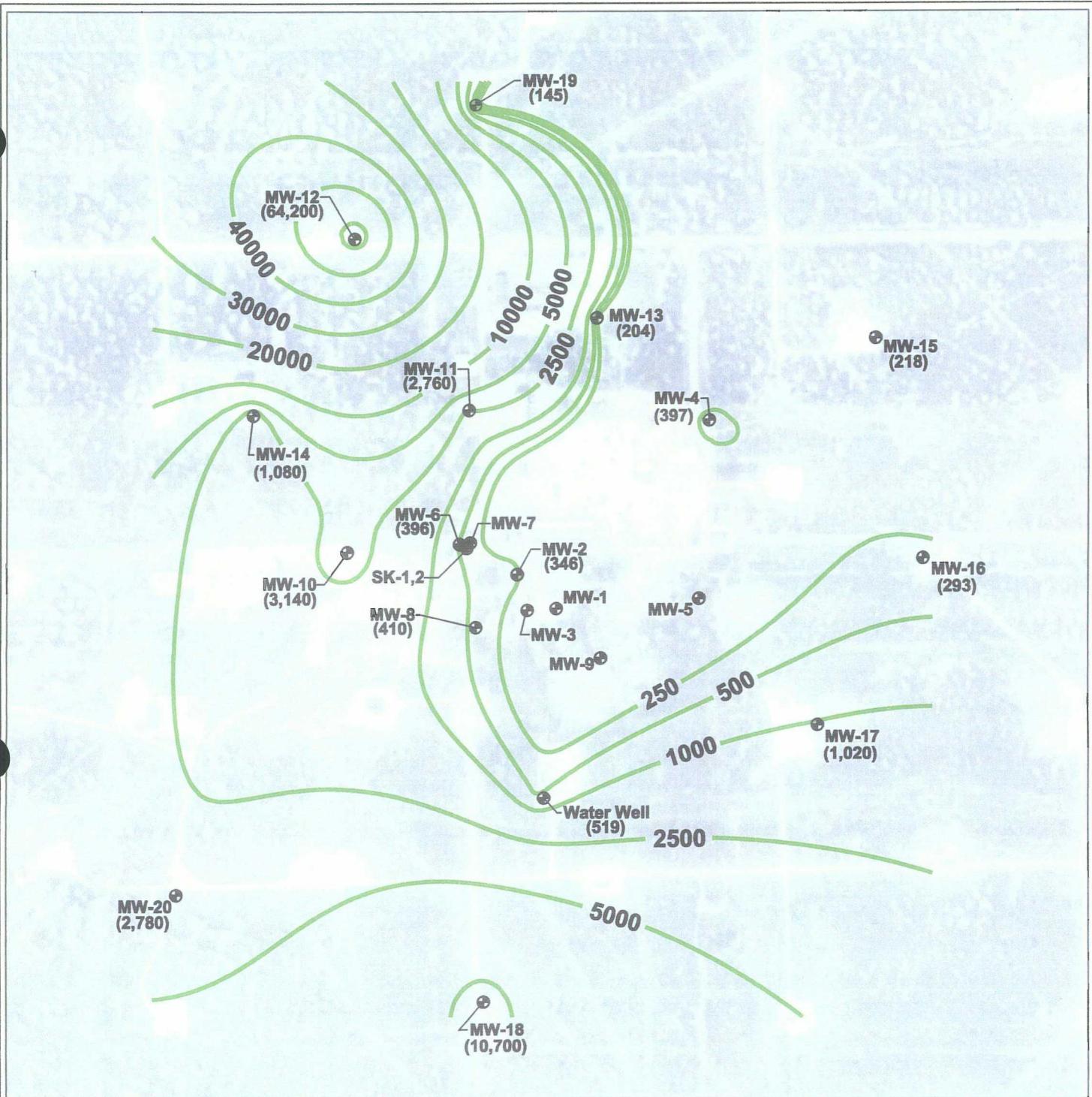
**ConocoPhillips**

**MAXIM**  
TECHNOLOGIES  
A DIVISION OF TETRATECH, INC.

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/08/2005

ACAD File: Maljamar.GW.Results.051005.dwg



Source: Aerial Photo (dated 1/1996) Downloaded From Microsoft/USGS Terraserver

#### LEGEND

Monitoring Well Location

(10,600) Chloride Concentration (mg/L)

5000 Chloride Concentration Contour

Notes: Groundwater Analytical Data Collected May 5-7, 2004.

mg/L = milligrams per liter

0 600 1200  
SCALE (feet)



FIGURE  
7  
MALJAMAR GAS PLANT  
CHLORIDE CONCENTRATION  
ISOPLETH MAP  
MAY 10, 2005

LEA COUNTY,  
NEW MEXICO  
Sec 21 T17S R32E

MAXIM  
TECHNOLOGIES  
A DIVISION OF TETRA TECH, INC.

PROJECT NO. 5640004  
DRAWING BY: GWP  
DRAWING DATE: 08/05/2005  
ACAD File: Maljamar.Chloride Conc.051005.dwg

## **TABLES**

- Table 1      Monitoring Well Construction Details**
- Table 2      Water Level Measurements**
- Table 3a     MW-6 Groundwater Quality Analyses – April 5, 2005**
- Table 3b     Groundwater Quality Analyses – May 11-13, 2005**
- Table 4      Extraction Well MW-6 Groundwater Quality Measurements**
- Table 5      Extraction Well Recovery Volumes**
- Table 6      Hydrocarbon Recovery Pilot Test Data**

**Table 1**  
**Monitoring Well Construction Details**  
**ConocoPhillips**  
**Maljamar Gas Plant**  
**Lea County, New Mexico**

Monitoring Well Number	Location Coordinates		Top of Casing Elevation (famsl)		Depth		Screen Interval* (fbgs)	Casing Diameter (inches)	Well Installation Date
	Northing	Easting	Total (fbgs)	Casing (fbgs)	Water (fbgs)	Condensate (fbgs)			
MW-1	32.81208	-103.77181	4002.24	97	0-72	77.00	72-92	2	06/21/2000
MW-2	32.81250	-103.77244	4005.12	98	0-67	76.32	67-97	2	09/28/2000
MW-3	32.81206	-103.77228	4001.94	98	0-68	76.94	68-98	2	09/28/2000
MW-4	32.81425	-103.76967	4016.20	110	0-80	94.88	80-110	2	05/22/2001
MW-5	32.81217	-103.76989	4009.42	100	0-70	90.20	70-100	2	05/22/2001
MW-6				105	0-105		70-100	6	03/31/2004
MW-7	32.81281	-103.77308	4002.94	100	0-70	81.58	75.38	70-100	2
MW-8	32.81192	-103.77294	4000.72	100	0-70	76.10	70-100	2	05/23/2001
MW-9	32.81150	-103.77119	4003.11	100	0-70	83.63	70-100	2	05/23/2001
MW-10	32.81269	-103.77478	4000.47	97	0-74	73.39	74-94	2	12/05/2001
MW-11	32.81442	-103.77314	4015.54	120	0-98	83.46	98-118	2	12/04/2001
MW-12	32.81644	-103.77456	4022.71	120	0-99	94.39	99-119	2	12/04/2001
MW-13	32.81547	-103.77128	4031.96	127	0-105	106.68	105-125	2	12/03/2001
MW-14	32.81436	-103.77603	4006.98	120	0-80	75.00	80-100	4	03/20/2002
MW-15	32.81523	-103.76737	4026.75	130	0-99	113.50	99-129	2	09/17/2002
MW-16	32.81264	-103.76686	4017.74	130	0-98	113.50	98-128	2	09/17/2002
MW-17	32.81066	-103.76825	3998.58	100	0-79	97.36	79-99	2	09/17/2002
MW-18	32.80754	-103.77293	3980.46	110	0-87	85.91	87-107	2	09/17/2002
MW-19	32.81796	-103.77289	4037.34	120	0-98	117.23	98-118	2	09/17/2002
MW-20	32.80878	-103.77718	3976.92	120	0-80	75.90	80-100	2	09/18/2002
SK-1	32.81278	-103.77312	4002.94**	105	0-85	74.07	85-105	4	03/21/2002
SK-2	32.81275	-103.77312	4002.94**	89.5	0-69	72.89	69-89	4	12/18/2002

Notes:

famsl = feet above mean sea level

fbgs = feet below ground surface

\* Screen slot size = 0.010 inches

\*\* Approximate elevation

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-1	05/21/01	4002.24	78.25		0.00	0.00	78.25	3923.99
	06/29/01	4002.24	78.24		0.00	0.00	78.24	3924.00
	12/13/01	4002.24	78.66		0.00	0.00	78.66	3923.58
	03/22/02	4002.24	79.00		0.00	0.00	79.00	3923.24
	09/16/02	4002.24	79.44	79.25	0.19	0.15	79.29	3922.95
	09/20/02	4002.24	79.35	79.13	0.22	0.18	79.17	3923.07
	09/04/03	4002.24	78.34		0.00	0.00	78.34	3923.90
	04/05/04	4002.24	80.23	80.22	0.01	0.01	80.22	3922.02
	05/17/04	4002.24	81.32	80.28	1.04	0.83	80.49	3921.75
	05/24/04	4002.24	81.30	80.25	1.05	0.84	80.46	3921.78
	06/01/04	4002.24	81.36	80.30	1.06	0.85	80.51	3921.73
	06/07/04	4002.24	81.28	80.26	1.02	0.82	80.46	3921.78
	06/15/04	4002.24	81.43	80.36	1.07	0.86	80.57	3921.67
	06/21/04	4002.24	81.42	80.39	1.03	0.82	80.60	3921.64
	06/28/04	4002.24	81.69	80.58	1.11	0.89	80.80	3921.44
	07/06/04	4002.24	81.59	80.49	1.10	0.88	80.71	3921.53
	07/12/04	4002.24	81.67	80.57	1.10	0.88	80.79	3921.45
	07/19/04	4002.24	81.63	80.57	1.06	0.85	80.78	3921.46
	07/26/04	4002.24	81.82	80.72	1.10	0.88	80.94	3921.30
	08/02/04	4002.24	81.72	80.63	1.09	0.87	80.85	3921.39
	08/10/04	4002.24	81.82	80.72	1.10	0.88	80.94	3921.30
	08/16/04	4002.24	81.83	80.74	1.09	0.87	80.96	3921.28
	08/23/04	4002.24	81.61	80.57	1.04	0.83	80.78	3921.46
	08/30/04	4002.24	81.84	80.75	1.09	0.87	80.97	3921.27
	09/08/04	4002.24	81.91	80.83	1.08	0.86	81.05	3921.19
	10/08/04	4002.24	81.92	80.87	1.05	0.84	81.08	3921.16
	12/30/04	4002.24	81.94	80.97	0.97	0.78	81.16	3921.08
	01/17/05	4002.24	82.28	81.27	1.01	0.81	81.47	3920.77
	02/09/05	4002.24	NM	NM				
	03/09/05	4002.24	82.30	81.23	1.07	0.86	81.44	3920.80
	04/05/05	4002.24	82.05	81.04	1.01	0.81	81.24	3921.00
	05/10/05	4002.24	82.15	81.16	0.99	0.79	81.36	3920.88
	06/08/05	4002.24	82.24	81.23	1.01	0.81	81.43	3920.81
	07/05/05	4002.24	82.49	81.43	1.06	0.85	81.64	3920.60
MW-2	05/21/01	4005.12	76.63		0.00	0.00	76.63	3928.49
	06/29/01	4005.12	76.57		0.00	0.00	76.57	3928.55
	12/13/01	4005.12	76.94		0.00	0.00	76.94	3928.18
	02/28/02	4005.12	76.92		0.00	0.00	76.92	3928.20
	03/22/02	4005.12	77.29		0.00	0.00	77.29	3927.83
	09/16/02	4005.12	77.57		0.00	0.00	77.57	3927.55
	09/20/02	4005.12	77.47		0.00	0.00	77.47	3927.65
	04/05/04	4005.12	80.23		0.00	0.00	80.23	3924.89
	05/17/04	4005.12	78.62		0.00	0.00	78.62	3926.50
	05/24/04	4005.12	78.81		0.00	0.00	78.81	3926.31
	06/01/04	4005.12	79.06		0.00	0.00	79.06	3926.06
	06/07/04	4005.12	79.04		0.00	0.00	79.04	3926.08
	06/15/04	4005.12	79.20		0.00	0.00	79.20	3925.92
	06/21/04	4005.12	79.23		0.00	0.00	79.23	3925.89
	06/28/04	4005.12	79.54		0.00	0.00	79.54	3925.58
	07/06/04	4005.12	79.38		0.00	0.00	79.38	3925.74
	07/12/04	4005.12	79.50		0.00	0.00	79.50	3925.62
	07/19/04	4005.12	79.45		0.00	0.00	79.45	3925.67
	07/26/04	4005.12	79.68		0.00	0.00	79.68	3925.44
	08/02/04	4005.12	79.52		0.00	0.00	79.52	3925.60
	08/10/04	4005.12	79.66		0.00	0.00	79.66	3925.46
	08/16/04	4005.12	79.65		0.00	0.00	79.65	3925.47
	08/23/04	4005.12	79.39		0.00	0.00	79.39	3925.73
	08/30/04	4005.12	79.64		0.00	0.00	79.64	3925.48
	09/08/04	4005.12	79.94	79.73	0.21	0.17	79.77	3925.35
	10/08/04	4005.12	79.73		0.00	0.00	79.73	3925.39
	12/30/05	4005.12	79.71		0.00	0.00	79.71	3925.41
	01/17/05	4005.12	79.85		0.00	0.00	79.85	3925.27
	02/09/05	4005.12	NM	NM				

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-2 cont.	03/09/05	4005.12	80.00		0.00	0.00	80.00	3925.12
	04/05/05	4005.12	79.72		0.00	0.00	79.72	3925.40
	05/10/05	4005.12	79.77		0.00	0.00	79.77	3925.35
	06/08/05	4005.12	79.83		0.00	0.00	79.83	3925.29
	07/05/05	4005.12	80.13		0.00	0.00	80.13	3924.99
MW-3	02/06/02	4001.94	79.30	77.13	2.17	1.74	77.56	3924.38
	02/13/02	4001.94	79.62	77.71	1.91	1.53	78.09	3923.85
	03/22/02	4001.94	78.05	77.80	0.25	0.20	77.85	3924.09
	09/16/02	4001.94	78.18	78.14	0.04	0.03	78.15	3923.79
	09/20/02	4001.94	77.98	77.98	0.00	0.00	77.98	3923.96
	09/04/03	4001.94	79.29	78.91	0.38	0.30	78.99	3922.95
	04/05/04	4001.94	79.10	79.04	0.06	0.05	79.05	3922.89
	05/17/04	4001.94	79.46	79.08	0.38	0.30	79.16	3922.78
	05/24/04	4001.94	79.41	79.05	0.36	0.29	79.12	3922.82
	06/01/04	4001.94	79.58	79.17	0.41	0.33	79.25	3922.69
	06/07/04	4001.94	79.50	79.12	0.38	0.30	79.20	3922.74
	06/15/04	4001.94	79.68	79.24	0.44	0.35	79.33	3922.61
	06/21/04	4001.94	79.65	79.24	0.41	0.33	79.32	3922.62
	06/28/04	4001.94	80.04	79.53	0.51	0.41	79.63	3922.31
	07/06/04	4001.94	79.87	79.40	0.47	0.38	79.49	3922.45
	07/12/04	4001.94	80.00	79.49	0.51	0.41	79.59	3922.35
	07/19/04	4001.94	79.94	79.46	0.48	0.38	79.56	3922.38
	07/26/04	4001.94	80.18	79.65	0.53	0.42	79.76	3922.18
	08/02/04	4001.94	80.01	79.52	0.49	0.39	79.62	3922.32
	08/10/04	4001.94	80.12	79.59	0.53	0.42	79.70	3922.24
	08/16/04	4001.94	80.16	79.62	0.54	0.43	79.73	3922.21
	08/23/04	4001.94	79.82	79.39	0.43	0.34	79.48	3922.46
	08/30/04	4001.94	80.14	79.62	0.52	0.42	79.72	3922.22
	09/08/04	4001.94	80.24	79.68	0.56	0.45	79.79	3922.15
	10/08/04	4001.94	80.19	79.69	0.50	0.40	79.79	3922.15
	12/30/05	4001.94	80.13	79.71	0.42	0.34	79.79	3922.15
	01/17/05	4001.94	80.57	79.00	1.57	1.26	79.31	3922.63
	02/09/05	4001.94	NM	NM				
	03/09/05	4001.94	80.50	80.00	0.50	0.40	80.10	3921.84
	04/05/05	4001.94	80.14	79.79	0.35	0.28	79.86	3922.08
	05/10/05	4001.94	80.23	79.84	0.39	0.31	79.92	3922.02
	06/08/05	4001.94	80.34	79.91	0.43	0.34	80.00	3921.94
	07/05/05	4001.94	80.69	80.15	0.54	0.43	80.26	3921.68
MW-4	05/22/01	4016.20	95.20		0.00	0.00	95.20	3921.00
	05/24/01	4016.20	94.88		0.00	0.00	94.88	3921.32
	06/29/01	4016.20	94.87		0.00	0.00	94.87	3921.33
	12/13/01	4016.20	95.27		0.00	0.00	95.27	3920.93
	03/22/02	4016.20	95.37		0.00	0.00	95.37	3920.83
	09/16/02	4016.20	95.53		0.00	0.00	95.53	3920.67
	09/20/02	4016.20	95.42		0.00	0.00	95.42	3920.78
	04/05/04	4016.20	96.38		0.00	0.00	96.38	3919.82
	05/17/04	4016.20	96.43		0.00	0.00	96.43	3919.77
	05/24/04	4016.20	96.37		0.00	0.00	96.37	3919.83
	06/01/04	4016.20	96.42		0.00	0.00	96.42	3919.78
	06/07/04	4016.20	96.34		0.00	0.00	96.34	3919.86
	06/15/04	4016.20	96.45		0.00	0.00	96.45	3919.75
	06/21/04	4016.20	96.42		0.00	0.00	96.42	3919.78
	06/28/04	4016.20	96.66		0.00	0.00	96.66	3919.54
	07/06/04	4016.20	96.54		0.00	0.00	96.54	3919.66
	07/12/04	4016.20	96.62		0.00	0.00	96.62	3919.58
	07/19/04	4016.20	96.56		0.00	0.00	96.56	3919.64
	07/26/04	4016.20	96.73		0.00	0.00	96.73	3919.47
	08/02/04	4016.20	96.61		0.00	0.00	96.61	3919.59
	08/10/04	4016.20	96.75		0.00	0.00	96.75	3919.45
	08/16/04	4016.20	96.69		0.00	0.00	96.69	3919.51
	08/23/04	4016.20	96.49		0.00	0.00	96.49	3919.71
	08/30/04	4016.20	96.69		0.00	0.00	96.69	3919.51

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-4 cont.	09/08/04	4016.20	96.74		0.00	0.00	96.74	3919.46
	10/08/04	4016.20	96.71		0.00	0.00	96.71	3919.49
	12/30/05	4016.20	96.65		0.00	0.00	96.65	3919.55
	01/17/05	4016.20	97.03		0.00	0.00	97.03	3919.17
	02/09/05	4016.20	96.94		0.00	0.00	96.94	3919.26
	03/09/05	4016.20	96.96		0.00	0.00	96.96	3919.24
	04/05/05	4016.20	96.71		0.00	0.00	96.71	3919.49
	05/10/05	4016.20	96.75		0.00	0.00	96.75	3919.45
	06/08/05	4016.20	96.85		0.00	0.00	96.85	3919.35
	07/05/05	4016.20	97.08		0.00	0.00	97.08	3919.12
MW-5	05/23/01	4009.42	90.38		0.00	0.00	90.38	3919.04
	05/24/01	4009.42	90.20		0.00	0.00	90.20	3919.22
	12/13/01	4009.42	90.25		0.00	0.00	90.25	3919.17
	03/22/02	4009.42	90.24	90.22	0.02	0.02	90.22	3919.20
	09/16/02	4009.42	90.98	90.66	0.32	0.26	90.72	3918.70
	09/20/02	4009.42	90.88	90.59	0.29	0.23	90.65	3918.77
	04/05/04	4009.42	92.00	91.82	0.18	0.14	91.86	3917.56
	05/17/04	4009.42	92.10	91.91	0.19	0.15	91.95	3917.47
	05/24/04	4009.42	92.03	91.84	0.19	0.15	91.88	3917.54
	06/01/04	4009.42	92.10	91.91	0.19	0.15	91.95	3917.47
	06/07/04	4009.42	91.99	91.86	0.13	0.10	91.89	3917.53
	06/15/04	4009.42	92.12	91.94	0.18	0.14	91.98	3917.44
	06/21/04	4009.42	92.11	91.95	0.16	0.13	91.98	3917.44
	06/28/04	4009.42	92.33	92.15	0.18	0.14	92.19	3917.23
	07/06/04	4009.42	92.24	92.04	0.20	0.16	92.08	3917.34
	07/12/04	4009.42	92.31	92.12	0.19	0.15	92.16	3917.26
	07/19/04	4009.42	92.27	92.08	0.19	0.15	92.12	3917.30
	07/26/04	4009.42	92.39	92.19	0.20	0.16	92.23	3917.19
	08/02/04	4009.42	92.33	92.13	0.20	0.16	92.17	3917.25
	08/10/04	4009.42	92.40	92.21	0.19	0.15	92.25	3917.17
	08/16/04	4009.42	92.42	92.22	0.20	0.16	92.26	3917.16
	08/23/04	4009.42	92.15	92.02	0.13	0.10	92.05	3917.37
	08/30/04	4009.42	92.44	92.26	0.18	0.14	92.30	3917.12
	09/06/04	4009.42	92.44	92.24	0.20	0.16	92.28	3917.14
	10/08/04	4009.42	92.43	92.27	0.16	0.13	92.30	3917.12
	12/30/05	4009.42	92.41	92.34	0.07	0.06	92.35	3917.07
	01/17/05	4009.42	92.65	92.57	0.08	0.06	92.59	3916.83
	02/09/05	4009.42	92.61	92.57	0.04	0.03	92.58	3916.84
	03/09/05	4009.42	92.65	92.63	0.02	0.02	92.63	3916.79
	04/05/05	4009.42	92.38		0.00	0.00	92.38	3917.04
	05/10/05	4009.42	92.40		0.00	0.00	92.40	3917.02
	06/08/05	4009.42	92.54		0.00	0.00	92.54	3916.88
	07/05/05	4009.42	92.78		0.00	0.00	92.78	3916.64
MW-7	05/24/01	4002.94	75.38		0.00	0.00	75.38	3927.56
	02/06/02	4002.94	76.62	69.86	6.76	5.41	71.21	3931.73
	02/20/02	4002.94	76.16	69.92	6.24	4.99	71.17	3931.77
	02/28/02	4002.94	75.74	69.89	5.85	4.68	71.06	3931.88
	03/22/02	4002.94	76.40	70.07	6.33	5.06	71.34	3931.60
	09/16/02	4002.94	76.56	70.51	6.05	4.84	71.72	3931.22
	09/20/02	4002.94	76.08	70.23	5.85	4.68	71.40	3931.54
	12/20/02	4002.94	75.09	70.98	4.11	3.29	71.80	3931.14
	01/21/03	4002.94	75.43	71.11	4.32	3.46	71.97	3930.97
	01/22/03	4002.94	75.44	70.97	4.47	3.58	71.86	3931.08
	01/29/03	4002.94	75.47	71.04	4.43	3.54	71.93	3931.01
	02/10/03	4002.94	75.53	71.00	4.53	3.62	71.91	3931.03
	02/17/03	4002.94	75.40	70.92	4.48	3.58	71.82	3931.12
	03/20/03	4002.94	75.51	70.91	4.60	3.68	71.83	3931.11
	03/27/03	4002.94	75.09	70.64	4.45	3.56	71.53	3931.41
	04/08/03	4002.94	76.09	71.41	4.68	3.74	72.35	3930.59
	04/16/03	4002.94	75.52	70.87	4.65	3.72	71.80	3931.14
	04/23/03	4002.94	75.31	70.69	4.62	3.70	71.61	3931.33
	04/30/03	4002.94	75.44	70.84	4.60	3.68	71.76	3931.18

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-7 cont.	05/13/03	4002.94	75.66	71.02	4.64	3.71	71.95	3930.99
	05/19/03	4002.94	75.63	71.00	4.63	3.70	71.93	3931.01
	05/28/03	4002.94	75.95	71.33	4.62	3.70	72.25	3930.69
	06/04/03	4002.94	75.44	70.85	4.59	3.67	71.77	3931.17
	06/18/03	4002.94	75.64	71.10	4.54	3.63	72.01	3930.93
	08/28/03	4002.94	76.02	71.13	4.89	3.91	72.11	3930.83
	09/24/03	4002.94	76.17	71.42	4.75	3.80	72.37	3930.57
	04/05/04	4002.94	76.05	71.64	4.41	3.53	72.52	3930.42
	05/17/04	4002.94	87.40	72.50	14.90	11.92	75.48	3927.46
	05/24/04	4002.94	91.11	75.30	15.81	12.65	78.46	3924.48
	06/01/04	4002.94	85.60	73.17	12.43	9.94	75.66	3927.28
	06/07/04	4002.94	85.50	73.11	12.39	9.91	75.59	3927.35
	06/15/04	4002.94	79.80	73.18	6.62	5.30	74.50	3928.44
	06/21/04	4002.94	85.15	73.41	11.74	9.39	75.76	3927.18
	06/28/04	4002.94	84.98	73.51	11.47	9.18	75.80	3927.14
	07/06/04	4002.94	85.13	73.52	11.61	9.29	75.84	3927.10
	07/12/04	4002.94	85.16	73.66	11.50	9.20	75.96	3926.98
	07/19/04	4002.94	85.31	73.74	11.57	9.26	76.05	3926.89
	07/26/04	4002.94	85.27	73.76	11.51	9.21	76.06	3926.88
	08/02/04	4002.94	85.43	73.87	11.56	9.25	76.18	3926.76
	08/10/04	4002.94	NM	NM				
	08/16/04	4002.94	85.06	73.68	11.38	9.10	75.96	3926.98
	08/23/04	4002.94	85.21	73.75	11.46	9.17	76.04	3926.90
	08/30/04	4002.94	85.41	73.93	11.48	9.18	76.23	3926.71
	09/08/04	4002.94	84.70	73.79	10.91	8.73	75.97	3926.97
	10/08/04	4002.94	84.10	73.91	10.19	8.15	75.95	3926.99
	12/30/05	4002.94	81.78	74.50	7.28	5.82	75.96	3926.98
MW-8	01/17/05	4002.94	77.57	74.56	3.01	2.41	75.16	3927.78
	02/09/05	4002.94	78.77	75.46	3.31	2.65	76.12	3926.82
	03/09/05	4002.94	78.68	75.41	3.27	2.62	76.06	3926.88
	04/05/05	4002.94	78.36	75.12	3.24	2.59	75.77	3927.17
	05/10/05	4002.94	78.19	75.02	3.17	2.54	75.65	3927.29
	06/08/05	4002.94	76.62	75.67	0.95	0.76	75.86	3927.08
	07/05/05	4002.94	76.88	75.77	1.11	0.89	75.99	3926.95
	05/23/01	4000.72	77.00		0.00	0.00	77.00	3923.72
	05/24/01	4000.72	76.10		0.00	0.00	76.10	3924.62
	06/29/01	4000.72	76.12		0.00	0.00	76.12	3924.60
	12/13/01	4000.72	70.43		0.00	0.00	70.43	3930.29
	02/28/02	4000.72	76.40		0.00	0.00	76.40	3924.32
	03/22/02	4000.72	76.90		0.00	0.00	76.90	3923.82
	09/16/02	4000.72	77.02		0.00	0.00	77.02	3923.70
	09/20/02	4000.72	76.85		0.00	0.00	76.85	3923.87
	09/04/03	4000.72	77.82		0.00	0.00	77.82	3922.90
	04/05/04	4000.72	78.04		0.00	0.00	78.04	3922.68
	05/17/04	4000.72	78.08		0.00	0.00	78.08	3922.64
	05/24/04	4000.72	78.07		0.00	0.00	78.07	3922.65
	06/01/04	4000.72	78.17		0.00	0.00	78.17	3922.55
	06/07/04	4000.72	78.14		0.00	0.00	78.14	3922.58
	06/15/04	4000.72	78.29		0.00	0.00	78.29	3922.43
	06/21/04	4000.72	78.31		0.00	0.00	78.31	3922.41
	06/28/04	4000.72	78.65		0.00	0.00	78.65	3922.07
	07/06/04	4000.72	78.49		0.00	0.00	78.49	3922.23
	07/12/04	4000.72	78.61		0.00	0.00	78.61	3922.11
	07/19/04	4000.72	78.57		0.00	0.00	78.57	3922.15
	07/26/04	4000.72	78.79		0.00	0.00	78.79	3921.93
	08/02/04	4000.72	78.65		0.00	0.00	78.65	3922.07
	08/10/04	4000.72	78.79		0.00	0.00	78.79	3921.93
	08/16/04	4000.72	78.78		0.00	0.00	78.78	3921.94
	08/23/04	4000.72	78.53		0.00	0.00	78.53	3922.19
	08/30/04	4000.72	78.77		0.00	0.00	78.77	3921.95
	09/08/04	4000.72	78.87		0.00	0.00	78.87	3921.85
	10/08/04	4000.72	78.87		0.00	0.00	78.87	3921.85
	12/30/05	4000.72	78.91		0.00	0.00	78.91	3921.81

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-8 cont.	01/17/05	4000.72	79.27		0.00	0.00	79.27	3921.45
	02/09/05	4000.72	79.15		0.00	0.00	79.15	3921.57
	03/09/05	4000.72	79.18		0.00	0.00	79.18	3921.54
	04/05/05	4000.72	78.84		0.00	0.00	78.84	3921.88
	05/10/05	4000.72	78.87		0.00	0.00	78.87	3921.85
	06/08/05	4000.72	79.11	78.82	0.29	0.23	78.88	3921.84
	07/05/05	4000.72	79.05	79.01	0.04	0.03	79.02	3921.70
MW-9	05/23/01	4003.11	83.00		0.00	0.00	83.00	3920.11
	05/24/01	4003.11	83.63		0.00	0.00	83.63	3919.48
	06/29/01	4003.11	83.55		0.00	0.00	83.55	3919.56
	12/13/01	4003.11	83.91		0.00	0.00	83.91	3919.20
	03/22/02	4003.11	84.08		0.00	0.00	84.08	3919.03
	09/16/02	4003.11	84.44		0.00	0.00	84.44	3918.67
	09/20/02	4003.11	84.44		0.00	0.00	84.44	3918.67
	04/05/04	4003.11	84.58		0.00	0.00	84.58	3918.53
	05/17/04	4003.11	89.30	84.65	4.65	3.72	85.58	3917.53
	05/24/04	4003.11	89.29	84.57	4.72	3.78	85.51	3917.60
	06/01/04	4003.11	89.31	84.67	4.64	3.71	85.60	3917.51
	06/07/04	4003.11	89.29	84.59	4.70	3.76	85.53	3917.58
	06/15/04	4003.11	89.37	84.70	4.67	3.74	85.63	3917.48
	06/21/04	4003.11	89.38	84.69	4.69	3.75	85.63	3917.48
	06/28/04	4003.11	89.51	84.92	4.59	3.67	85.84	3917.27
	07/06/04	4003.11	89.42	84.83	4.59	3.67	85.75	3917.36
	07/12/04	4003.11	89.51	84.89	4.62	3.70	85.81	3917.30
	07/19/04	4003.11	89.47	84.86	4.61	3.69	85.78	3917.33
	07/26/04	4003.11	89.58	85.00	4.58	3.66	85.92	3917.19
	08/02/04	4003.11	89.44	84.93	4.51	3.61	85.83	3917.28
	08/10/04	4003.11	89.53	85.10	4.43	3.54	85.99	3917.12
	08/16/04	4003.11	89.50	85.03	4.47	3.58	85.92	3917.19
	08/23/04	4003.11	89.27	84.87	4.40	3.52	85.75	3917.36
	08/30/04	4003.11	89.45	85.17	4.28	3.42	86.03	3917.08
	09/08/04	4003.11	89.48	85.12	4.36	3.49	85.99	3917.12
	10/08/04	4003.11	89.39	85.14	4.25	3.40	85.99	3917.12
	12/30/05	4003.11	89.24	85.25	3.99	3.19	86.05	3917.06
	01/17/05	4003.11	89.59	85.47	4.12	3.30	86.29	3916.82
	02/09/05	4003.11	NM	NM				
	03/09/05	4003.11	89.58	85.47	4.11	3.29	86.29	3916.82
	04/05/05	4003.11	89.30	85.30	4.00	3.20	86.10	3917.01
	05/10/05	4003.11	89.42	85.29	4.13	3.30	86.12	3916.99
	06/08/05	4003.11	89.54	85.25	4.29	3.43	86.11	3917.00
	07/05/05	4003.11	89.72	85.53	4.19	3.35	86.37	3916.74
MW-10	12/13/01	4000.47	70.39		0.00	0.00	70.39	3930.08
	03/22/02	4000.47	70.76		0.00	0.00	70.76	3929.71
	09/16/02	4000.47	70.92		0.00	0.00	70.92	3929.55
	09/20/02	4000.47	70.79		0.00	0.00	70.79	3929.68
	09/04/03	4000.47	71.69		0.00	0.00	71.69	3928.78
	04/05/04	4000.47	71.87		0.00	0.00	71.87	3928.60
	05/17/04	4000.47	71.92		0.00	0.00	71.92	3928.55
	05/24/04	4000.47	71.85		0.00	0.00	71.85	3928.62
	06/01/04	4000.47	71.90		0.00	0.00	71.90	3928.57
	06/07/04	4000.47	71.83		0.00	0.00	71.83	3928.64
	06/15/04	4000.47	71.97		0.00	0.00	71.97	3928.50
	06/21/04	4000.47	71.94		0.00	0.00	71.94	3928.53
	06/28/04	4000.47	72.26		0.00	0.00	72.26	3928.21
	07/06/04	4000.47	72.14		0.00	0.00	72.14	3928.33
	07/12/04	4000.47	72.23		0.00	0.00	72.23	3928.24
	07/19/04	4000.47	72.19		0.00	0.00	72.19	3928.28
	07/26/04	4000.47	72.37		0.00	0.00	72.37	3928.10
	08/02/04	4000.47	72.25		0.00	0.00	72.25	3928.22
	08/10/04	4000.47	72.39		0.00	0.00	72.39	3928.08
	08/16/04	4000.47	72.36		0.00	0.00	72.36	3928.11
	08/23/04	4000.47	72.13		0.00	0.00	72.13	3928.34

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-10 cont.	08/30/04	4000.47	72.37		0.00	0.00	72.37	3928.10
	09/08/04	4000.47	72.45		0.00	0.00	72.45	3928.02
	10/08/04	4000.47	72.45		0.00	0.00	72.45	3928.02
	12/30/05	4000.47	72.53		0.00	0.00	72.53	3927.94
	01/17/05	4000.47	72.86		0.00	0.00	72.86	3927.61
	02/09/05	4000.47	72.82		0.00	0.00	72.82	3927.65
	03/09/05	4000.47	72.86		0.00	0.00	72.86	3927.61
	04/05/05	4000.47	72.57		0.00	0.00	72.57	3927.90
	05/10/05	4000.47	72.63		0.00	0.00	72.63	3927.84
	06/08/05	4000.47	72.74		0.00	0.00	72.74	3927.73
	07/05/05	4000.47	73.01		0.00	0.00	73.01	3927.46
MW-11	12/13/01	4015.54	81.38		0.00	0.00	81.38	3934.16
	03/22/02	4015.54	83.60		0.00	0.00	83.60	3931.94
	09/16/02	4015.54	83.82		0.00	0.00	83.82	3931.72
	09/20/02	4015.54	83.70		0.00	0.00	83.70	3931.84
	09/04/03	4015.54	84.50		0.00	0.00	84.50	3931.04
	04/05/04	4015.54	84.54		0.00	0.00	84.54	3931.00
	05/17/04	4015.54	84.64		0.00	0.00	84.64	3930.90
	05/24/04	4015.54	84.55		0.00	0.00	84.55	3930.99
	06/01/04	4015.54	84.61		0.00	0.00	84.61	3930.93
	06/07/04	4015.54	84.58		0.00	0.00	84.58	3930.96
	06/15/04	4015.54	84.69		0.00	0.00	84.69	3930.85
	06/21/04	4015.54	84.72		0.00	0.00	84.72	3930.82
	06/28/04	4015.54	84.99		0.00	0.00	84.99	3930.55
	07/06/04	4015.54	84.83		0.00	0.00	84.83	3930.71
	07/12/04	4015.54	84.96		0.00	0.00	84.96	3930.58
	07/19/04	4015.54	84.90		0.00	0.00	84.90	3930.64
	07/26/04	4015.54	85.11		0.00	0.00	85.11	3930.43
	08/02/04	4015.54	84.96		0.00	0.00	84.96	3930.58
	08/10/04	4015.54	85.09		0.00	0.00	85.09	3930.45
	08/16/04	4015.54	85.06		0.00	0.00	85.06	3930.48
	08/23/04	4015.54	84.83		0.00	0.00	84.83	3930.71
	08/30/04	4015.54	85.06		0.00	0.00	85.06	3930.48
	09/08/04	4015.54	85.14		0.00	0.00	85.14	3930.40
	10/08/04	4015.54	85.12		0.00	0.00	85.12	3930.42
	12/30/05	4015.54	85.12		0.00	0.00	85.12	3930.42
	01/17/05	4015.54	85.52		0.00	0.00	85.52	3930.02
	02/09/05	4015.54	85.33		0.00	0.00	85.33	3930.21
	03/09/05	4015.54	85.45		0.00	0.00	85.45	3930.09
	04/05/05	4015.54	85.15		0.00	0.00	85.15	3930.39
	05/10/05	4015.54	85.21		0.00	0.00	85.21	3930.33
	06/08/05	4015.54	85.31		0.00	0.00	85.31	3930.23
	07/05/05	4015.54	85.59		0.00	0.00	85.59	3929.95
MW-12	12/13/01	4022.71	91.43		0.00	0.00	91.43	3931.28
	03/22/02	4022.71	94.38		0.00	0.00	94.38	3928.33
	09/16/02	4022.71	94.51		0.00	0.00	94.51	3928.20
	09/20/02	4022.71	94.31		0.00	0.00	94.31	3928.40
	04/05/04	4022.71	94.59		0.00	0.00	94.59	3928.12
	05/17/04	4022.71	94.60		0.00	0.00	94.60	3928.11
	05/24/04	4022.71	94.51		0.00	0.00	94.51	3928.20
	06/01/04	4022.71	94.53		0.00	0.00	94.53	3928.18
	06/07/04	4022.71	94.45		0.00	0.00	94.45	3928.26
	06/15/04	4022.71	94.56		0.00	0.00	94.56	3928.15
	06/21/04	4022.71	94.57		0.00	0.00	94.57	3928.14
	06/28/04	4022.71	94.84		0.00	0.00	94.84	3927.87
	07/06/04	4022.71	94.70		0.00	0.00	94.70	3928.01
	07/12/04	4022.71	94.80		0.00	0.00	94.80	3927.91
	07/19/04	4022.71	94.74		0.00	0.00	94.74	3927.97
	07/26/04	4022.71	94.92		0.00	0.00	94.92	3927.79
	08/02/04	4022.71	94.77		0.00	0.00	94.77	3927.94
	08/10/04	4022.71	94.88		0.00	0.00	94.88	3927.83
	08/16/04	4022.71	94.86		0.00	0.00	94.86	3927.85

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-12 cont.	08/23/04	4022.71	94.60		0.00	0.00	94.60	3928.11
	08/30/04	4022.71	94.82		0.00	0.00	94.82	3927.89
	09/08/04	4022.71	94.89		0.00	0.00	94.89	3927.82
	10/08/04	4022.71	94.83		0.00	0.00	94.83	3927.88
	12/30/05	4022.71	94.72		0.00	0.00	94.72	3927.99
	01/17/05	4022.71	95.06		0.00	0.00	95.06	3927.65
	02/09/05	4022.71	94.94		0.00	0.00	94.94	3927.77
	03/09/05	4022.71	94.92		0.00	0.00	94.92	3927.79
	04/05/05	4022.71	94.58		0.00	0.00	94.58	3928.13
	05/10/05	4022.71	94.61		0.00	0.00	94.61	3928.10
	06/08/05	4022.71	94.58		0.00	0.00	94.58	3928.13
	07/05/05	4022.71	94.84		0.00	0.00	94.84	3927.87
MW-13	12/13/01	4031.96	103.76		0.00	0.00	103.76	3928.20
	03/22/02	4031.96	107.18		0.00	0.00	107.18	3924.78
	09/16/02	4031.96	107.58		0.00	0.00	107.58	3924.38
	09/20/02	4031.96	107.48		0.00	0.00	107.48	3924.48
	04/05/04	4031.96	108.04		0.00	0.00	108.04	3923.92
	05/17/04	4031.96	108.06		0.00	0.00	108.06	3923.90
	05/24/04	4031.96	107.97		0.00	0.00	107.97	3923.99
	06/01/04	4031.96	107.97		0.00	0.00	107.97	3923.99
	06/07/04	4031.96	107.89		0.00	0.00	107.89	3924.07
	06/15/04	4031.96	107.99		0.00	0.00	107.99	3923.97
	06/21/04	4031.96	107.98		0.00	0.00	107.98	3923.98
	06/28/04	4031.96	108.29		0.00	0.00	108.29	3923.67
	07/06/04	4031.96	108.12		0.00	0.00	108.12	3923.84
	07/12/04	4031.96	108.22		0.00	0.00	108.22	3923.74
	07/19/04	4031.96	108.16		0.00	0.00	108.16	3923.80
	07/26/04	4031.96	108.34		0.00	0.00	108.34	3923.62
	08/02/04	4031.96	108.17		0.00	0.00	108.17	3923.79
	08/10/04	4031.96	108.29		0.00	0.00	108.29	3923.67
	08/16/04	4031.96	108.27		0.00	0.00	108.27	3923.69
	08/23/04	4031.96	108.01		0.00	0.00	108.01	3923.95
	08/30/04	4031.96	108.24		0.00	0.00	108.24	3923.72
	09/08/04	4031.96	108.31		0.00	0.00	108.31	3923.65
	10/08/04	4031.96	108.23		0.00	0.00	108.23	3923.73
	12/30/05	4031.96	108.12		0.00	0.00	108.12	3923.84
	01/17/05	4031.96	108.49		0.00	0.00	108.49	3923.47
	02/09/05	4031.96	108.38		0.00	0.00	108.38	3923.58
	03/09/05	4031.96	108.44		0.00	0.00	108.44	3923.52
	04/05/05	4031.96	108.04		0.00	0.00	108.04	3923.92
	05/10/05	4031.96	108.09		0.00	0.00	108.09	3923.87
	06/08/05	4031.96	108.18		0.00	0.00	108.18	3923.78
	07/05/05	4031.96	108.47		0.00	0.00	108.47	3923.49
MW-14	12/13/01	4006.98	74.67		0.00	0.00	74.67	3932.31
	03/22/02	4006.98	74.67		0.00	0.00	74.67	3932.31
	09/16/02	4006.98	74.56		0.00	0.00	74.56	3932.42
	09/20/02	4006.98	74.40		0.00	0.00	74.40	3932.58
	04/05/04	4006.98	75.20		0.00	0.00	75.20	3931.78
	05/17/04	4006.98	75.25		0.00	0.00	75.25	3931.73
	05/24/04	4006.98	75.17		0.00	0.00	75.17	3931.81
	06/01/04	4006.98	75.18		0.00	0.00	75.18	3931.80
	06/07/04	4006.98	75.12		0.00	0.00	75.12	3931.86
	06/15/04	4006.98	75.23		0.00	0.00	75.23	3931.75
	06/21/04	4006.98	75.24		0.00	0.00	75.24	3931.74
	06/28/04	4006.98	75.55		0.00	0.00	75.55	3931.43
	07/06/04	4006.98	75.37		0.00	0.00	75.37	3931.61
	07/12/04	4006.98	75.49		0.00	0.00	75.49	3931.49
	07/19/04	4006.98	75.43		0.00	0.00	75.43	3931.55
	07/26/04	4006.98	75.64		0.00	0.00	75.64	3931.34
	08/02/04	4006.98	75.49		0.00	0.00	75.49	3931.49
	08/10/04	4006.98	75.62		0.00	0.00	75.62	3931.36
	08/16/04	4006.98	75.59		0.00	0.00	75.59	3931.39
	08/23/04	4006.98	75.32		0.00	0.00	75.32	3931.66

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-14 cont.	08/30/04	4006.98	75.57		0.00	0.00	75.57	3931.41
	09/08/04	4006.98	75.65		0.00	0.00	75.65	3931.33
	10/08/04	4006.98	75.61		0.00	0.00	75.61	3931.37
	12/30/05	4006.98	75.45		0.00	0.00	75.45	3931.53
	01/17/05	4006.98	75.74		0.00	0.00	75.74	3931.24
	02/09/05	4006.98	75.46		0.00	0.00	75.46	3931.52
	03/09/05	4006.98	75.37		0.00	0.00	75.37	3931.61
	04/05/05	4006.98	74.84		0.00	0.00	74.84	3932.14
	05/10/05	4006.98	74.72		0.00	0.00	74.72	3932.26
	06/08/05	4006.98	74.71		0.00	0.00	74.71	3932.27
	07/05/05	4006.98	74.93		0.00	0.00	74.93	3932.05
MW-15	09/20/02	4026.75	118.93		0.00	0.00	118.93	3907.82
	04/05/04	4026.75	119.65		0.00	0.00	119.65	3907.10
	05/17/04	4026.75	119.56		0.00	0.00	119.56	3907.19
	05/24/04	4026.75	119.63		0.00	0.00	119.63	3907.12
	06/01/04	4026.75	119.62		0.00	0.00	119.62	3907.13
	06/07/04	4026.75	119.63		0.00	0.00	119.63	3907.12
	06/15/04	4026.75	119.66		0.00	0.00	119.66	3907.09
	06/21/04	4026.75	119.69		0.00	0.00	119.69	3907.06
	06/28/04	4026.75	119.78		0.00	0.00	119.78	3906.97
	07/06/04	4026.75	119.77		0.00	0.00	119.77	3906.98
	07/12/04	4026.75	119.79		0.00	0.00	119.79	3906.96
	07/19/04	4026.75	119.80		0.00	0.00	119.80	3906.95
	07/26/04	4026.75	119.86		0.00	0.00	119.86	3906.89
	08/02/04	4026.75	119.83		0.00	0.00	119.83	3906.92
	08/10/04	4026.75	119.87		0.00	0.00	119.87	3906.88
	08/16/04	4026.75	119.88		0.00	0.00	119.88	3906.87
	08/23/04	4026.75	119.82		0.00	0.00	119.82	3906.93
	08/30/04	4026.75	119.88		0.00	0.00	119.88	3906.87
	09/08/04	4026.75	119.92		0.00	0.00	119.92	3906.83
	10/08/04	4026.75	119.94		0.00	0.00	119.94	3906.81
	12/30/05	4026.75	120.03		0.00	0.00	120.03	3906.72
	01/17/05	4026.75	120.12		0.00	0.00	120.12	3906.63
	02/09/05	4026.75	120.12		0.00	0.00	120.12	3906.63
	03/09/05	4026.75	120.14		0.00	0.00	120.14	3906.61
	04/05/05	4026.75	120.05		0.00	0.00	120.05	3906.70
	05/10/05	4026.75	120.11		0.00	0.00	120.11	3906.64
	06/08/05	4026.75	120.14		0.00	0.00	120.14	3906.61
	07/05/05	4026.75	120.24		0.00	0.00	120.24	3906.51
MW-16	09/20/02	4017.74	113.50		0.00	0.00	113.50	3904.24
	04/05/04	4017.74	113.88		0.00	0.00	113.88	3903.86
	05/17/04	4017.74	113.92		0.00	0.00	113.92	3903.82
	05/24/04	4017.74	113.83		0.00	0.00	113.83	3903.91
	06/01/04	4017.74	113.89		0.00	0.00	113.89	3903.85
	06/07/04	4017.74	113.80		0.00	0.00	113.80	3903.94
	06/15/04	4017.74	113.88		0.00	0.00	113.88	3903.86
	06/21/04	4017.74	113.90		0.00	0.00	113.90	3903.84
	06/28/04	4017.74	114.18		0.00	0.00	114.18	3903.56
	07/06/04	4017.74	114.01		0.00	0.00	114.01	3903.73
	07/12/04	4017.74	114.13		0.00	0.00	114.13	3903.61
	07/19/04	4017.74	114.06		0.00	0.00	114.06	3903.68
	07/26/04	4017.74	114.22		0.00	0.00	114.22	3903.52
	08/02/04	4017.74	114.07		0.00	0.00	114.07	3903.67
	08/10/04	4017.74	114.21		0.00	0.00	114.21	3903.53
	08/16/04	4017.74	114.08		0.00	0.00	114.08	3903.66
	08/23/04	4017.74	113.97		0.00	0.00	113.97	3903.77
	08/30/04	4017.74	114.13		0.00	0.00	114.13	3903.61
	09/08/04	4017.74	114.21		0.00	0.00	114.21	3903.53
	10/08/04	4017.74	114.15		0.00	0.00	114.15	3903.59
	12/30/04	4017.74	114.03		0.00	0.00	114.03	3903.71
	01/17/05	4017.74	114.39		0.00	0.00	114.39	3903.35
	02/09/05	4017.74	114.26		0.00	0.00	114.26	3903.48

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-16 cont.	03/09/05	4017.74	114.29		0.00	0.00	114.29	3903.45
	04/05/05	4017.74	113.94		0.00	0.00	113.94	3903.80
	05/10/05	4017.74	114.01		0.00	0.00	114.01	3903.73
	06/08/05	4017.74	114.10		0.00	0.00	114.10	3903.64
	07/05/05	4017.74	114.40		0.00	0.00	114.40	3903.34
MW-17	09/20/02	3998.58	97.36		0.00	0.00	97.36	3901.22
	04/05/04	3998.58	97.28		0.00	0.00	97.28	3901.30
	05/17/04	3998.58	97.37		0.00	0.00	97.37	3901.21
	05/24/04	3998.58	97.35		0.00	0.00	97.35	3901.23
	06/01/04	3998.58	97.33		0.00	0.00	97.33	3901.25
	06/07/04	3998.58	97.41		0.00	0.00	97.41	3901.17
	06/15/04	3998.58	97.39		0.00	0.00	97.39	3901.19
	06/21/04	3998.58	97.41		0.00	0.00	97.41	3901.17
	06/28/04	3998.58	97.51		0.00	0.00	97.51	3901.07
	07/06/04	3998.58	97.45		0.00	0.00	97.45	3901.13
	07/12/04	3998.58	97.53		0.00	0.00	97.53	3901.05
	07/19/04	3998.58	97.49		0.00	0.00	97.49	3901.09
	07/26/04	3998.58	97.55		0.00	0.00	97.55	3901.03
	08/02/04	3998.58	97.51		0.00	0.00	97.51	3901.07
	08/10/04	3998.58	97.55		0.00	0.00	97.55	3901.03
	08/16/04	3998.58	97.56		0.00	0.00	97.56	3901.02
	08/23/04	3998.58	97.49		0.00	0.00	97.49	3901.09
	08/30/04	3998.58	97.53		0.00	0.00	97.53	3901.05
	09/08/04	3998.58	97.56		0.00	0.00	97.56	3901.02
	10/08/04	3998.58	97.58		0.00	0.00	97.58	3901.00
	12/30/05	3998.58	97.61		0.00	0.00	97.61	3900.97
	01/17/05	3998.58	97.72		0.00	0.00	97.72	3900.86
	02/09/05	3998.58	97.63		0.00	0.00	97.63	3900.95
	03/09/05	3998.58	97.68		0.00	0.00	97.68	3900.90
	04/05/05	3998.58	97.32		0.00	0.00	97.32	3901.26
	05/10/05	3998.58	97.41		0.00	0.00	97.41	3901.17
	06/08/05	3998.58	97.59		0.00	0.00	97.59	3900.99
	07/05/05	3998.58	97.68		0.00	0.00	97.68	3900.90
MW-18	09/20/02	3980.46	85.91		0.00	0.00	85.91	3894.55
	04/05/04	3980.46	86.61		0.00	0.00	86.61	3893.85
	05/17/04	3980.46	86.63		0.00	0.00	86.63	3893.83
	05/24/04	3980.46	86.58		0.00	0.00	86.58	3893.88
	06/01/04	3980.46	86.57		0.00	0.00	86.57	3893.89
	06/07/04	3980.46	86.50		0.00	0.00	86.50	3893.96
	06/15/04	3980.46	86.59		0.00	0.00	86.59	3893.87
	06/21/04	3980.46	86.60		0.00	0.00	86.60	3893.86
	06/28/04	3980.46	86.79		0.00	0.00	86.79	3893.67
	07/06/04	3980.46	86.74		0.00	0.00	86.74	3893.72
	07/12/04	3980.46	86.77		0.00	0.00	86.77	3893.69
	07/19/04	3980.46	86.76		0.00	0.00	86.76	3893.70
	07/26/04	3980.46	86.91		0.00	0.00	86.91	3893.55
	08/02/04	3980.46	86.81		0.00	0.00	86.81	3893.65
	08/10/04	3980.46	86.93		0.00	0.00	86.93	3893.53
	08/16/04	3980.46	86.90		0.00	0.00	86.90	3893.56
	08/23/04	3980.46	86.63		0.00	0.00	86.63	3893.83
	08/30/04	3980.46	86.86		0.00	0.00	86.86	3893.60
	09/08/04	3980.46	86.92		0.00	0.00	86.92	3893.54
	10/08/04	3980.46	86.87		0.00	0.00	86.87	3893.59
	12/30/05	3980.46	86.74		0.00	0.00	86.74	3893.72
	01/17/05	3980.46	87.09		0.00	0.00	87.09	3893.37
	02/09/05	3980.46	86.97		0.00	0.00	86.97	3893.49
	03/09/05	3980.46	86.98		0.00	0.00	86.98	3893.48
	04/05/05	3980.46	86.64		0.00	0.00	86.64	3893.82
	05/10/05	3980.46	86.68		0.00	0.00	86.68	3893.78
	06/08/05	3980.46	86.75		0.00	0.00	86.75	3893.71
	07/05/05	3980.46	87.03		0.00	0.00	87.03	3893.43

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-19	09/20/02	4037.34	117.23		0.00	0.00	116.67	3920.67
	04/05/04	4037.34	116.67		0.00	0.00	116.67	3920.67
	05/17/04	4037.34	116.62		0.00	0.00	116.62	3920.72
	05/24/04	4037.34	116.59		0.00	0.00	116.59	3920.75
	06/01/04	4037.34	116.57		0.00	0.00	116.57	3920.77
	06/07/04	4037.34	116.59		0.00	0.00	116.59	3920.75
	06/15/04	4037.34	116.53		0.00	0.00	116.53	3920.81
	06/21/04	4037.34	116.63		0.00	0.00	116.63	3920.71
	06/28/04	4037.34	116.68		0.00	0.00	116.68	3920.66
	07/06/04	4037.34	116.65		0.00	0.00	116.65	3920.69
	07/12/04	4037.34	116.66		0.00	0.00	116.66	3920.68
	07/19/04	4037.34	116.68		0.00	0.00	116.68	3920.66
	07/26/04	4037.34	116.73		0.00	0.00	116.73	3920.61
	08/02/04	4037.34	116.71		0.00	0.00	116.71	3920.63
	08/10/04	4037.34	116.71		0.00	0.00	116.71	3920.63
	08/16/04	4037.34	116.74		0.00	0.00	116.74	3920.60
	08/23/04	4037.34	116.69		0.00	0.00	116.69	3920.65
	08/30/04	4037.34	116.69		0.00	0.00	116.69	3920.65
	09/08/04	4037.34	116.73		0.00	0.00	116.73	3920.61
	10/08/04	4037.34	116.78		0.00	0.00	116.78	3920.56
	12/30/05	4037.34	116.76		0.00	0.00	116.76	3920.58
	01/17/05	4037.34	116.78		0.00	0.00	116.78	3920.56
	02/09/05	4037.34	116.76		0.00	0.00	116.76	3920.58
	03/09/05	4037.34	116.70		0.00	0.00	116.70	3920.64
	04/05/05	4037.34	116.64		0.00	0.00	116.64	3920.70
	05/10/05	4037.34	116.63		0.00	0.00	116.63	3920.71
	06/08/05	4037.34	116.57		0.00	0.00	116.57	3920.77
	07/05/05	4037.34	116.64		0.00	0.00	116.64	3920.70
MW-20	09/20/02	3976.92	75.90		0.00	0.00	75.90	3901.02
	04/05/04	3976.92	76.13		0.00	0.00	76.13	3900.79
	05/17/04	3976.92	76.16		0.00	0.00	76.16	3900.76
	05/24/04	3976.92	76.11		0.00	0.00	76.11	3900.81
	06/01/04	3976.92	76.14		0.00	0.00	76.14	3900.78
	06/07/04	3976.92	76.10		0.00	0.00	76.10	3900.82
	06/15/04	3976.92	76.17		0.00	0.00	76.17	3900.75
	06/21/04	3976.92	76.15		0.00	0.00	76.15	3900.77
	06/28/04	3976.92	76.36		0.00	0.00	76.36	3900.56
	07/06/04	3976.92	76.24		0.00	0.00	76.24	3900.68
	07/12/04	3976.92	76.31		0.00	0.00	76.31	3900.61
	07/19/04	3976.92	76.26		0.00	0.00	76.26	3900.66
	07/26/04	3976.92	76.41		0.00	0.00	76.41	3900.51
	08/02/04	3976.92	76.28		0.00	0.00	76.28	3900.64
	08/10/04	3976.92	76.37		0.00	0.00	76.37	3900.55
	08/16/04	3976.92	76.32		0.00	0.00	76.32	3900.60
	08/23/04	3976.92	76.13		0.00	0.00	76.13	3900.79
	08/30/04	3976.92	76.30		0.00	0.00	76.30	3900.62
	09/08/04	3976.92	76.02		0.00	0.00	76.02	3900.90
	10/08/04	3976.92	74.45		0.00	0.00	74.45	3902.47
	12/30/05	3976.92	73.18		0.00	0.00	73.18	3903.74
	01/17/05	3976.92	73.89		0.00	0.00	73.89	3903.03
	02/09/05	3976.92	74.27		0.00	0.00	74.27	3902.65
	03/09/05	3976.92	74.86		0.00	0.00	74.86	3902.06
	04/05/05	3976.92	75.03		0.00	0.00	75.03	3901.89
	05/10/05	3976.92	75.28		0.00	0.00	75.28	3901.64
	06/08/05	3976.92	75.48		0.00	0.00	75.48	3901.44
	07/05/05	3976.92	75.58		0.00	0.00	75.58	3901.34
SK-1	03/22/02	4002.94	74.07	74.02	0.05	0.04	74.03	3928.91
	09/16/02	4002.94	74.40	74.38	0.02	0.02	74.38	3928.56
	04/05/04	4002.94	76.81	74.30	2.51	2.01	74.80	3928.14
	05/17/04	4002.94	80.67	78.17	2.50	2.00	78.67	3924.27
	06/21/04	4002.94	84.37	81.68	2.69	2.15	82.22	3920.72
	06/21/04	4002.94	80.95	78.28	2.67	2.14	78.81	3924.13

**Table 2**  
**Water Level Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico  
*(all measurements in feet)*

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
SK-1 cont.	06/07/04	4002.94	80.72	78.04	2.68	2.14	78.58	3924.36
	06/15/04	4002.94	80.69	78.03	2.66	2.13	78.56	3924.38
	06/21/04	4002.94	80.86	78.18	2.68	2.14	78.72	3924.22
	06/28/04	4002.94	80.95	78.30	2.65	2.12	78.83	3924.11
	07/06/04	4002.94	79.99	78.34	1.65	1.32	78.67	3924.27
	07/12/04	4002.94	81.03	78.38	2.65	2.12	78.91	3924.03
	07/19/04	4002.94	81.16	78.38	2.78	2.22	78.94	3924.00
	07/26/04	4002.94	81.41	78.56	2.85	2.28	79.13	3923.81
	08/02/04	4002.94	81.73	78.46	3.27	2.62	79.11	3923.83
	08/10/04	4002.94	82.15	77.99	4.16	3.33	78.82	3924.12
	08/16/04	4002.94	82.84	77.77	5.07	4.06	78.78	3924.16
	08/23/04	4002.94	83.75	77.61	6.14	4.91	78.84	3924.10
	08/30/04	4002.94	84.42	77.41	7.01	5.61	78.81	3924.13
	09/08/04	4002.94	85.19	77.00	8.19	6.55	78.64	3924.30
	10/08/04	4002.94	86.99	76.24	10.75	8.60	78.39	3924.55
	12/30/05	4002.94	85.50	76.35	9.15	7.32	78.18	3924.76
	01/17/05	4002.94	82.03	76.16	5.87	4.70	77.33	3925.61
	02/09/05	4002.94	84.30	76.99	7.31	5.85	78.45	3924.49
	03/09/05	4002.94	84.20	76.83	7.37	5.90	78.30	3924.64
	04/05/05	4002.94	84.18	76.56	7.62	6.10	78.08	3924.86
	05/10/05	4002.94	84.08	76.42	7.66	6.13	77.95	3924.99
	06/08/05	4002.94	82.13	77.20	4.93	3.94	78.19	3924.75
	07/05/05	4002.94	82.29	77.27	5.02	4.02	78.27	3924.67
SK-2	12/19/02	4002.94	72.89	72.89	0.00	0.00	72.89	3930.05
	12/20/02	4002.94	74.08	73.73	0.35	0.28	73.80	3929.14
	12/30/02	4002.94	74.01	73.63	0.38	0.30	73.71	3929.23
	01/03/03	4002.94	74.42	73.79	0.63	0.50	73.92	3929.02
	01/07/03	4002.94	74.72	74.05	0.67	0.54	74.18	3928.76
	01/10/03	4002.94	75.38	73.74	1.64	1.31	74.07	3928.87
	01/15/03	4002.94	74.32	73.71	0.61	0.49	73.83	3929.11
	01/21/03	4002.94	74.53	73.60	0.93	0.74	73.79	3929.15
	02/17/03	4002.94	74.19	73.70	0.49	0.39	73.80	3929.14
	05/28/03	4002.94	74.54	73.79	0.75	0.60	73.94	3929.00
	06/07/04	4002.94	78.94	75.29	3.65	2.92	76.02	3926.92
	06/15/04	4002.94	79.21	75.38	3.83	3.06	76.15	3926.79
	06/21/04	4002.94	79.03	75.45	3.58	2.86	76.17	3926.77
	06/28/04	4002.94	79.63	75.62	4.01	3.21	76.42	3926.52
	07/06/04	4002.94	79.46	75.59	3.87	3.10	76.36	3926.58
	07/12/04	4002.94	79.61	75.68	3.93	3.14	76.47	3926.47
	07/19/04	4002.94	79.28	75.74	3.54	2.83	76.45	3926.49
	07/26/04	4002.94	79.63	75.83	3.80	3.04	76.59	3926.35
	08/02/04	4002.94	79.37	75.79	3.58	2.86	76.51	3926.43
	08/10/04	4002.94	79.59	75.85	3.74	2.99	76.60	3926.34
	08/16/04	4002.94	79.48	75.90	3.58	2.86	76.62	3926.32
	08/23/04	4002.94	78.97	75.83	3.14	2.51	76.46	3926.48
	08/30/04	4002.94	79.52	75.96	3.56	2.85	76.67	3926.27
	09/08/04	4002.94	79.62	76.01	3.61	2.89	76.73	3926.21
	10/08/04	4002.94	79.41	76.10	3.31	2.65	76.76	3926.18
	12/30/05	4002.94	79.14	76.16	2.98	2.38	76.76	3926.18
	01/17/05	4002.94	78.16	75.96	2.20	1.76	76.40	3926.54
	02/09/05	4002.94	79.31	76.31	3.00	2.40	76.91	3926.03
	03/09/05	4002.94	79.24	76.36	2.88	2.30	76.94	3926.00
	04/05/05	4002.94	78.57	76.17	2.40	1.92	76.65	3926.29
	05/10/05	4002.94	78.55	76.20	2.35	1.88	76.67	3926.27
	06/08/05	4002.94	77.68	76.58	1.10	0.88	76.80	3926.14
	07/05/05	4002.94	78.06	76.73	1.33	1.06	77.00	3925.94

Notes:

L.P.H. = Liquid Phase Hydrocarbon

NM = Not Measured

Blank Fields Indicate No Data

**Table 3a**  
**MW-6 Groundwater Quality Analyses**  
**April 5, 2005**  
**ConocoPhillips**  
**Majamar Gas Plant**  
**Lea County, New Mexico**

Parameters (mg/L)	MW-6	NM WQ Std
<i>Trace Metals</i>		
Calcium	151	
Magnesium	63.5	
Potassium	ND	
Sodium	81.9	
<i>Volatile Organic Compounds</i>		
Benzene	<b>4.7</b>	0.01
Ethylbenzene	0.25	0.75
Toluene	0.17	0.75
Xylenes (total)	ND	0.62
<i>Inorganic Analysis</i>		
Carbonate Alkalinity	ND	
Bicarbonate Alkalinity	218	
Total Alkalinity	218	
Chloride	<b>421</b>	250
Sulfate	19.7	600
Total Dissolved Solids	<b>1,350</b>	1,000

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory detection limits.

NM WQ Std = New Mexico Water Quality Standard

Trip blank reported non-detect for BTEX concentrations.

Blank fields indicate no data.

Table

**Groundwater Quality Analyses**  
**May 11-13, 2005**  
**ConocoPhillips**  
**Majamar Gas Plant**  
**Lea County, New Mexico**

Parameters (mg/L)	WW	MW-2	MW-4	MW-6	MW-8	QA*	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	NM WQ Std
<i>Trace Metals</i>																		
Calcium	215	223	156	155	201	207	811	785	5,140	183	536	114	192	417	2,370	215	719	
Magnesium	70.7	42.0	48.2	70.6	48.1	49.6	210	226	1,480	43.5	170	50.9	55.5	91.1	755	44.4	270	
Potassium	ND	8.2	ND	ND	ND	9.9	7.0	142	ND	6.1	ND	ND	ND	ND	37.8	8.2	14.7	
Sodium	147	61.1	77.4	81.7	38.9	41.6	791	265	30,100	55.8	62.6	49.8	75.2	251	3410	48.0	49.9	
<i>Volatile Organic Compounds</i>																		
Benzene	ND	51	0.0086	4.8	22	23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
Ethylbenzene	0.0026	ND	0.031	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75
Toluene	ND	13	ND	ND	1.9	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75
Xylenes (total)	ND	ND	0.056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.62
<i>Semi-volatile Organic Compounds</i>																		
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	0.0097	0.011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<i>Inorganic Analysis</i>																		
Carbonate Alkalinity	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bicarbonate Alkalinity	201	290	169	231	163	182	169	191	75.4	204	180	206	258	127	113	286	90.4	
Total Alkalinity	201	290	169	231	163	182	169	191	75.4	204	180	206	258	223	127	113	286	90.4
Chloride	519	346	397	410	408	3,140	2,760	64,200	204	1,080	218	293	1,020	10,700	145	2,780	256	
Sulfate	158	23.3	ND	12.1	ND	368	209	1,590	217	427	42.0	157	278	756	25.8	231	600	
Total Dissolved Solids	1,970	1,520	1,330	1,330	1,470	2,650	7,560	5,930	118,000	1,140	4,260	808	1,220	3,700	21,800	704	6,620	1,000

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory detection limits.

\* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

NM WQ Std = New Mexico Water Quality Standard

Trip blank used for sample shipping QA/QC reported non-detect for BTEX concentrations.

Blank fields indicate no data.

**Table 4**  
**Extraction Well MW-6**  
**Groundwater Quality Measurements**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico

Date	Specific Conductivity (mS/cm)	Salinity (ppt)	pH (units)	Temperature (°C)	Time	Comments
05/17/2004	1.62	0.81	7.93	24.0		
07/12/2004	1.70	0.85	8.23	21.5	10:27	
07/12/2004	1.69	0.84	8.26	21.4	10:29	
07/12/2004	1.69	0.84	8.27	21.3	10:30	
07/12/2004	1.69	0.84	8.26	21.1	10:31	
07/12/2004	1.69	0.84	8.25	21.2	10:33	
07/12/2004	1.71	0.85	8.26	20.9	10:35	
07/12/2004	1.69	0.84	8.23	21.0	10:37	pump off @10:37
07/26/2004	1.71	0.86	8.13	21.7	11:44	pump off @11:49
08/10/2004	1.71	0.85	8.26	23.3	10:13	
08/10/2004	1.71	0.85	8.32	22.4	10:15	
08/10/2004	1.71	0.86	8.39	22.1	10:17	
08/10/2004	1.71	0.86	8.42	21.6	10:18	
08/10/2004	1.72	0.86	8.47	21.7	10:22	
08/10/2004	1.74	0.87	8.38	21.5	10:27	
08/10/2004	1.73	0.86	8.39	21.7	10:29	pump off @ 10:29
08/16/2004	1.75	0.87	8.29	21.0	8:59	
08/16/2004	1.73	0.87	8.35	20.6	9:00	
08/16/2004	1.72	0.86	8.43	20.4	9:03	
08/16/2004	1.69	0.84	8.15	22.0	11:11	
08/16/2004	1.71	0.86	8.35	21.4	11:15	
08/16/2004	1.71	0.85	8.46	21.1	11:20	
08/16/2004	1.73	0.86	8.41	21.3	11:25	pump off @ 11:28
08/23/2004	1.72	0.86	8.31	21.3	8:15	
08/23/2004	1.73	0.86	8.41	21.1	8:20	
08/23/2004	1.75	0.87	8.42	21.2	8:25	pump off @ 08:27
08/30/2004	1.75	0.88	8.33	22.2	9:22	
08/30/2004	1.73	0.87	8.43	21.5	9:26	pump off @ 09:27
09/08/2004	1.72	0.86	8.21	21.4	9:00	
09/08/2004	1.72	0.86	8.47	21.6	9:05	
09/08/2004	1.74	0.87	8.46	21.1	9:10	pump off @ 09:13
10/08/2004	1.75	0.88	8.54	21.3	9:36	
10/08/2004	1.75	0.88	8.69	21.0	9:40	
10/08/2004	1.79	0.90	8.68	21.1	9:45	
10/08/2004	1.75	0.88	8.50	20.9	11:58	
10/08/2004	1.77	0.89	8.67	20.5	12:05	
10/08/2004	1.78	0.89	8.69	20.4	12:10	pump off @ 12:10
01/17/2005	1.46	0.73	7.44	16.6	10:55	
02/09/2005	1.45	0.72	7.14	18.5	11:20	
04/05/2005	2.08	1.04	7.23	19.4	10:00	

Notes:

mS/cm = millisiemens per centimeter

ppt = parts per trillion

°C = degrees Celsius

**Table 5**  
**Extraction Well Recovery Volumes**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico

Date	Time	Flowmeter Gallons Reading	Gallons Per Reading	Cumulative Gallons	Gallons Per Pumping Cycle
04/05/2004	14:45	1,506.45			
05/10/2004	10:35	1,770.90	264.45		
05/10/2004	12:28	1,940.00	169.10	433.55	
05/17/2004	14:50	14,792.65	12,852.65	13,286.20	
05/17/2004	17:09	15,045.55	252.90	13,539.10	
05/24/2004	13:51	27,260.85	12,215.30	25,754.40	
06/01/2004	8:07	34,896.40	7,635.55	33,389.95	
06/01/2004	9:41	34,910.00	13.60	33,403.55	
06/01/2004	10:51	35,008.60	98.60	33,502.15	112.20
06/01/2004	12:12	35,040.00	31.40	33,533.55	
06/01/2004	12:31	35,123.25	83.25	33,616.80	83.25
06/01/2004	13:51	35,130.30	7.05	33,623.85	
06/07/2004	8:04	42,007.30	6,877.00	40,500.85	
06/07/2004	9:19	42,080.90	73.60	40,574.45	73.60
06/07/2004	11:06	42,164.65	83.75	40,658.20	83.75
06/15/2004	8:06	51,167.30	9,002.65	49,660.85	
06/15/2004	9:10	51,230.00	62.70	49,723.55	95.65
06/15/2004	9:16	51,260.00	30.00	49,753.55	
06/15/2004	9:52	51,262.95	2.95	49,756.50	
06/15/2004	11:19	51,358.25	95.30	49,851.80	95.30
06/21/2004	8:21	57,670.00	6,311.75	56,163.55	
06/21/2004	8:27	57,710.00	40.00	56,203.55	
06/21/2004	8:56	57,735.65	25.65	56,229.20	
06/21/2004	10:47	57,830.35	94.70	56,323.90	94.70
06/28/2004	8:18	65,189.50	7,359.15	63,683.05	
06/28/2004	10:17	65,282.70	93.20	63,776.25	93.20
06/28/2004	12:28	65,376.90	94.20	63,870.45	94.20
07/06/2004	8:08	73,765.10	8,388.20	72,258.65	
07/06/2004	8:46	73,868.50	103.40	72,362.05	103.40
07/06/2004	13:41	74,044.45	175.95	72,538.00	175.95
07/12/2004	9:07	80,116.10	6,071.65	78,609.65	
07/12/2004	10:37	80,207.95	91.85	78,701.50	91.85
07/12/2004	13:07	80,300.40	92.45	78,793.95	
07/19/2004	8:08	87,253.85	6,953.45	85,747.40	
07/19/2004	8:45	87,358.20	104.35	85,851.75	104.35
07/19/2004	10:59	87,442.75	84.55	85,936.30	84.55
07/26/2004	9:01	94,366.45	6,923.70	92,860.00	
07/26/2004	9:31	94,460.95	94.50	92,954.50	94.50
07/26/2004	11:49	94,554.90	93.95	93,048.45	93.95
08/02/2004	8:05	101,564.60	7,009.70	100,058.15	
08/02/2004	8:45	101,658.50	93.90	100,152.05	93.90
08/02/2004	10:49	101,750.60	92.10	100,244.15	92.10
08/10/2004	8:26	109,577.25	7,826.65	108,070.80	
08/10/2004	10:29	109,668.75	91.50	108,162.30	91.50
08/10/2004	12:44	109,769.50	100.75	108,263.05	100.75
08/16/2004	8:12	115,282.00	5,512.50	113,775.55	
08/16/2004	9:03	115,374.45	92.45	113,868.00	92.45
08/16/2004	11:28	115,466.40	91.95	113,959.95	91.95

**Table 5**  
**Extraction Well Recovery Volumes**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico

Date	Time	Flowmeter Gallons Reading	Gallons Per Reading	Cumulative Gallons	Gallons Per Pumping Cycle
08/23/2004	8:27	122,334.20	6,867.80	120,827.75	
08/23/2004	11:13	122,424.30	90.10	120,917.85	90.10
08/23/2004	12:43	122,513.25	88.95	121,006.80	88.95
08/30/2004	8:09	129,069.60	6,556.35	127,563.15	
08/30/2004	9:27	129,150.00	80.40	127,643.55	
08/30/2004	12:03	129,239.55	89.55	127,733.10	89.55
09/08/2004	7:56	137,417.20	8,177.65	135,910.75	
09/08/2004	9:13	137,503.90	86.70	135,997.45	86.70
09/08/2004	12:01	137,587.95	84.05	136,081.50	84.05
10/08/2004	12:10	164,776.80	27,188.85	163,270.35	
12/30/2004	8:55	226,579.30	61,802.50	225,072.85	
01/17/2005	Install new groundwater totalizer flowmeter for MW-6				
01/17/2005	9:00	0.00	0.00	225,072.85	
01/17/2005	13:30	251.50	251.50	225,324.35	
02/09/2005	12:20	18,330.70	18,079.20	243,403.55	
03/09/2005	13:25	37,412.00	19,081.30	262,484.85	
04/05/2005	12:38	55,160.60	17,748.60	280,233.45	
05/20/2005	10:10	82,715.00	27,554.40	307,787.85	
06/08/2005	11:15	95,551.00	12,836.00	320,623.85	
07/05/2005	14:30	110,883.80	15,332.80	335,956.65	

**Table 6**  
**Hydrocarbon Recovery Pilot Test Data**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico

Recorded Date/Time	Top of Hydrocarbon (feet)	Top of Water (feet)	Hydrocarbon Thickness (feet)	Cumulative hr:min	Top of HC Difference (feet)	Top of Water Difference (feet)	Cumulative Minutes	Hydrocarbon Volume (gallons)
<b>SK-1 - Bailed Well</b>								
Drawdown <b>05/19/2005</b>								
5/19/05 13:45	76.51	84.18	7.67	0	0	0	0	5.0
<b>Recovery</b>								
5/19/05 14:25	83.22	83.78	0.56	0:00	6.71	-0.40	40	0.4
5/19/05 14:30	80.25	81.49	1.24	0:05	3.74	-2.69	45	0.8
5/19/05 14:35	79.88	81.18	1.30	0:10	3.37	-3.00	50	0.8
5/19/05 14:40	79.49	80.79	1.30	0:15	2.98	-3.39	55	0.8
5/19/05 14:50	79.25	80.56	1.31	0:25	2.74	-3.62	65	0.9
5/19/05 15:00	79.09	80.42	1.33	0:35	2.58	-3.76	75	0.9
5/19/05 15:15	78.78	80.11	1.33	0:50	2.27	-4.07	90	0.9
5/19/05 15:25	78.64	79.98	1.34	1:00	2.13	-4.20	100	0.9
5/19/05 15:35	78.50	79.83	1.33	1:10	1.99	-4.35	110	0.9
5/19/05 15:45	78.41	79.74	1.33	1:20	1.90	-4.44	120	0.9
5/19/05 16:00	78.30	79.65	1.35	1:35	1.79	-4.53	135	0.9
5/19/05 16:30	78.15	79.51	1.36	2:05	1.64	-4.67	165	0.9
5/19/05 17:00	78.05	79.43	1.38	2:35	1.54	-4.75	195	0.9
5/20/05 7:40	77.38	79.10	1.72	17:15	0.87	-5.08	1075	1.1
5/20/05 8:20	77.37	79.09	1.72	17:55	0.86	-5.09	1115	1.1
<b>MW-7 - Monitored Well</b>								
Drawdown <b>05/19/2005</b>								
5/19/05 13:45	75.07	78.25	3.18	0	0	0	0	2.1
<b>Recovery</b>								
5/19/05 14:25	75.61	78.94	3.33	0:00	0.54	0.69	40	2.2
5/19/05 14:30	75.67	78.96	3.29	0:05	0.60	0.71	45	2.1
5/19/05 14:35	75.67	78.90	3.23	0:10	0.60	0.65	50	2.1
5/19/05 14:40	75.57	78.81	3.24	0:15	0.50	0.56	55	2.1
5/19/05 14:50	75.50	78.73	3.23	0:25	0.43	0.48	65	2.1
5/19/05 15:00	75.44	78.65	3.21	0:35	0.37	0.40	75	2.1
5/19/05 15:15	75.35	78.56	3.21	0:50	0.28	0.31	90	2.1
5/19/05 15:25	75.30	78.50	3.20	1:00	0.23	0.25	100	2.1
5/19/05 15:35	75.25	78.43	3.18	1:10	0.18	0.18	110	2.1
5/19/05 15:45	75.20	78.38	3.18	1:20	0.13	0.13	120	2.1
5/19/05 16:00	75.15	78.30	3.15	1:35	0.08	0.05	135	2.0
5/19/05 16:30	75.07	78.21	3.14	2:05	0.00	-0.04	165	2.0
5/19/05 17:00	75.01	78.14	3.13	2:35	-0.06	-0.11	195	2.0
5/20/05 7:40	74.55	77.65	3.10	17:15	-0.52	-0.60	1075	2.0
5/20/05 8:20	74.55	77.65	3.10	17:55	-0.52	-0.60	1115	2.0
<b>SK-2 - Monitored Well</b>								
Drawdown <b>05/19/2005</b>								
5/19/05 13:45	76.28	78.67	2.39	0	0	0	0	1.6
<b>Recovery</b>								
5/19/05 14:25	77.60	78.12	0.52	0:00	1.32	-0.55	40	0.3
5/19/05 14:30	77.49	78.00	0.51	0:05	1.21	-0.67	45	0.3
5/19/05 14:35	77.34	77.85	0.51	0:10	1.06	-0.82	50	0.3
5/19/05 14:40	77.20	77.73	0.53	0:15	0.92	-0.94	55	0.3
5/19/05 14:50	77.18	77.70	0.52	0:25	0.90	-0.97	65	0.3
5/19/05 15:00	77.09	77.63	0.54	0:35	0.81	-1.04	75	0.4
5/19/05 15:15	77.01	77.56	0.55	0:50	0.73	-1.11	90	0.4
5/19/05 15:25	76.98	77.53	0.55	1:00	0.70	-1.14	100	0.4
5/19/05 15:35	76.95	77.52	0.57	1:10	0.67	-1.15	110	0.4
5/19/05 15:45	76.92	77.44	0.52	1:20	0.64	-1.23	120	0.3
5/19/05 16:00	76.90	77.46	0.56	1:35	0.62	-1.21	135	0.4
5/19/05 16:30	76.86	77.43	0.57	2:05	0.58	-1.24	165	0.4
5/19/05 17:00	76.83	77.41	0.58	2:35	0.55	-1.26	195	0.4
5/20/05 7:40	76.73	77.51	0.78	17:15	0.45	-1.16	1075	0.5
5/20/05 8:20	76.74	77.53	0.79	17:55	0.46	-1.14	1115	0.5

**Table 6**  
**Hydrocarbon Recovery Pilot Test Data**  
 ConocoPhillips  
 Maljamar Gas Plant  
 Lea County, New Mexico

Recorded Date/Time	Top of Hydrocarbon (feet)	Top of Water (feet)	Hydrocarbon Thickness (feet)	Cumulative hr:min	Top of HC Difference (feet)	Top of Water Difference (feet)	Cumulative Minutes	Hydrocarbon Volume (gallons)
<b>MW-7 - Bailed Well</b>								
Drawdown <b>05/20/2005</b>								
5/20/05 8:20	74.55	77.65	3.10	0	0	0	0	2.0
Recovery								
5/20/05 8:50	76.82	77.51	0.69	0:00	2.27	-0.14	30	0.4
5/20/05 8:55	76.00	76.85	0.85	0:05	1.45	-0.80	35	0.6
5/20/05 9:00	75.59	76.49	0.90	0:10	1.04	-1.16	40	0.6
5/20/05 9:10	75.45	76.35	0.90	0:20	0.90	-1.30	50	0.6
5/20/05 9:15	75.35	76.28	0.93	0:25	0.80	-1.37	55	0.6
5/20/05 9:20	75.32	76.25	0.93	0:30	0.77	-1.40	60	0.6
5/20/05 9:45	75.23	76.16	0.93	0:55	0.68	-1.49	85	0.6
5/20/05 10:00	75.21	76.13	0.92	1:10	0.66	-1.52	100	0.6
5/20/05 10:15	75.22	76.16	0.94	1:25	0.67	-1.49	115	0.6
<b>SK-1 - Monitored Well</b>								
Drawdown <b>05/20/2005</b>								
5/20/05 8:20	77.37	79.09	1.72	0	0	0	0	1.1
Recovery								
5/20/05 8:50	77.55	79.30	1.75	0:00	0.18	0.21	30	1.1
5/20/05 8:55	77.58	79.33	1.75	0:05	0.21	0.24	35	1.1
5/20/05 9:00	77.58	79.33	1.75	0:10	0.21	0.24	40	1.1
5/20/05 9:10	77.55	79.30	1.75	0:20	0.18	0.21	50	1.1
5/20/05 9:15	77.52	79.26	1.74	0:25	0.15	0.17	55	1.1
5/20/05 9:20	77.51	79.25	1.74	0:30	0.14	0.16	60	1.1
5/20/05 9:45	77.44	79.19	1.75	0:55	0.07	0.10	85	1.1
5/20/05 10:00	77.41	79.18	1.77	1:10	0.04	0.09	100	1.2
5/20/05 10:15	77.43	79.21	1.78	1:25	0.06	0.12	115	1.2
<b>SK-2 - Monitored Well</b>								
Drawdown <b>05/20/2005</b>								
5/20/05 8:20	76.74	77.53	0.79	0	0	0	0	0.5
Recovery								
5/20/05 8:50	76.75	77.54	0.79	0:00	0.01	0.01	30	0.5
5/20/05 8:55	76.75	77.54	0.79	0:05	0.01	0.01	35	0.5
5/20/05 9:00	76.75	77.54	0.79	0:10	0.01	0.01	40	0.5
5/20/05 9:10	76.75	77.54	0.79	0:20	0.01	0.01	50	0.5
5/20/05 9:15	76.75	77.54	0.79	0:25	0.01	0.01	55	0.5
5/20/05 9:20	76.75	77.54	0.79	0:30	0.01	0.01	60	0.5
5/20/05 9:45	76.76	77.56	0.80	0:55	0.02	0.03	85	0.5
5/20/05 10:00	76.76	77.56	0.80	1:10	0.02	0.03	100	0.5
5/20/05 10:15	76.76	77.57	0.81	1:25	0.02	0.04	115	0.5

## **APPENDIX A**

### **Laboratory Analytical Data**



STL Austin • 14046 Summit Drive, Austin, TX 78728 • Tel 512 244 0855 • Fax 512 244 0160 • www.stl-inc.com

## Certificate of Analysis

### ANALYTICAL REPORT

PROJECT NO. MALJAMAR, NM

6519 Maljamar Gas Plant

Lot #: I5D070180

Charles Durrett

Maxim Technologies  
1703 W Industrial Ave  
Midland, TX 79701

SEVERN TRENT LABORATORIES, INC.

*Carla Butler*  
Carla M. Butler  
Project Manager

April 22, 2005

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories

**Case Narrative****STL LOT NUMBER: I5D070180**

This report contains the analytical results for the two samples received under chain of custody by Severn Trent Laboratories (STL) on April 7, 2005. These samples are associated with your 6511 Maljamar Gas Plant project.

All samples were received in good condition and within temperature requirements.

Because a separate collection was not received for the metals analysis, the laboratory used a split from the liter collected for the wet chemistry tests.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (512) 244-0855.

**EXECUTIVE SUMMARY - Detection Highlights**

I5D070180

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-6 04/05/05 10:00 001</b>				
Calcium	151	5.0	mg/L	SW846 6010B
Magnesium	63.5	5.0	mg/L	SW846 6010B
Sodium	81.9	5.0	mg/L	SW846 6010B
Benzene	4700	100	ug/L	SW846 8260B
Ethylbenzene	250	100	ug/L	SW846 8260B
Toluene	170	100	ug/L	SW846 8260B
Total Dissolved Solids	1350	40.0	mg/L	MCAWW 160.1
Chloride	421	100	mg/L	MCAWW 300.0A
Sulfate	19.7	10.0	mg/L	MCAWW 300.0A
Bicarbonate	218	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	218	5.0	mg/L	MCAWW 310.1

## PREPARATION METHODS SUMMARY

I5D070180

<u>PREPARATION DESCRIPTION</u>	<u>PREPARATION METHOD</u>	<u>ANALYTICAL METHOD</u>
Acid Digestion for Total Recoverable Metals Chloride	SW846 3005A MCAWW 300.0A	SW846 6010B MCAWW 300.0A
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Potentiometric titration to preselected pH	MCAWW 310.1	MCAWW 310.1
Result obtained by calculation	MCAWW 310.1	MCAWW 310.1
Sulfate	MCAWW 300.0A	MCAWW 300.0A
15 mL Purge-and-Trap	SW846 5030B/826	SW846 8260B

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**METHOD / ANALYST SUMMARY**

I5D070180

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 160.1	Michael Sarmir	401945
MCAWW 300.0A	David A. Tocher	800002
MCAWW 310.1	David A. Tocher	800002
SW846 6010B	Hamid Davoudi	038010
SW846 8260B	David Yancey	014906

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY**

15D070180

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
G7V34	001	MW-6	04/05/05	10:00
G7V4N	002	TRIP BLANK	04/05/05	10:30

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**QC DATA ASSOCIATION SUMMARY**

15D070180

**Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 160.1		5098339	5102247
	WATER	MCAWW 310.1		5098106	
	WATER	MCAWW 300.0A		5102406	5102228
	WATER	MCAWW 300.0A		5102407	5102229
	WATER	SW846 8260B		5108082	5108054
	WATER	SW846 6010B		5102213	5102124
	WATER	MCAWW 310.1		5098105	
	WATER	MCAWW 310.1		5098104	5098046
002	WATER	SW846 8260B		5105107	5105074

ConocoPhillips

Client Sample ID: MW-6

GC/MS Volatiles

Lot-Sample #....: I5D070180-001 Work Order #....: G7V341AH Matrix.....: WATER  
 Date Sampled....: 04/05/05 10:00 Date Received...: 04/07/05 08:00  
 Prep Date.....: 04/15/05 Analysis Date...: 04/15/05  
 Prep Batch #....: 5108082 Analysis Time...: 12:21  
 Dilution Factor: 100

Method.....: SW846 8260B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Benzene	4700	100	ug/L
Ethylbenzene	250	100	ug/L
Toluene	170	100	ug/L
Xylenes (total)	ND	300	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS	
		(	)
1,2-Dichloroethane-d4	88	(67	- 130)
Toluene-d8	100	(83	- 115)
4-Bromofluorobenzene	92	(79	- 119)
Dibromofluoromethane	104	(88	- 119)

ConocoPhillips

Client Sample ID: MW-6

## TOTAL Metals

Lot-Sample #....: I5D070180-001                           Matrix.....: WATER  
 Date Sampled...: 04/05/05 10:00   Date Received..: 04/07/05 08:00

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 5102213</b>							
Calcium	151	5.0	mg/L	SW846 6010B		04/12-04/13/05 G7V341AC	
		Dilution Factor:	1		Analysis Time...:	12:34	
Magnesium	63.5	5.0	mg/L	SW846 6010B		04/12-04/13/05 G7V341AD	
		Dilution Factor:	1		Analysis Time...:	12:34	
Potassium	ND	5.0	mg/L	SW846 6010B		04/12-04/13/05 G7V341AE	
		Dilution Factor:	1		Analysis Time...:	12:34	
Sodium	81.9	5.0	mg/L	SW846 6010B		04/12-04/13/05 G7V341AF	
		Dilution Factor:	1		Analysis Time...:	12:34	

ConocoPhillips

Client Sample ID: MW-6

## General Chemistry

Lot-Sample #....: I5D070180-001    Work Order #....: G7V34    Matrix.....: WATER  
 Date Sampled...: 04/05/05 10:00    Date Received..: 04/07/05 08:00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Bicarbonate	218	5.0	mg/L	MCAWW 310.1	04/08/05	5098105
Alkalinity				Dilution Factor: 1	Analysis Time..: 09:00	
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	04/08/05	5098106
				Dilution Factor: 1	Analysis Time..: 09:00	
Chloride	421	100	mg/L	MCAWW 300.0A	04/12/05	5102406
				Dilution Factor: 100	Analysis Time..: 13:43	
Sulfate	19.7	10.0	mg/L	MCAWW 300.0A	04/12/05	5102407
				Dilution Factor: 10	Analysis Time..: 15:51	
Total Alkalinity	218	5.0	mg/L	MCAWW 310.1	04/08/05	5098104
				Dilution Factor: 1	Analysis Time..: 09:00	
Total Dissolved Solids	1350	40.0	mg/L	MCAWW 160.1	04/08/05	5098339
				Dilution Factor: 1	Analysis Time..: 11:12	

## ConocoPhillips

Client Sample ID: TRIP BLANK

## GC/MS Volatiles

Lot-Sample #....: 15D070180-002 Work Order #....: G7V4N1AA Matrix.....: WATER  
 Date Sampled....: 04/05/05 10:30 Date Received...: 04/07/05 08:00  
 Prep Date.....: 04/14/05 Analysis Date...: 04/14/05  
 Prep Batch #....: 5105107 Analysis Time...: 19:07  
 Dilution Factor: 1 Method.....: SW846 8260B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
1,2-Dichloroethane-d4	93	(67	- 130)
Toluene-d8	99	(83	- 115)
4-Bromofluorobenzene	91	(79	- 119)
Dibromofluoromethane	103	(88	- 119)

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: I5D070180      Work Order #...: G8FJ21AA      Matrix.....: WATER  
 MB Lot-Sample #: I5D150000-107  
 Analysis Date..: 04/14/05      Prep Date.....: 04/14/05      Analysis Time.: 12:14  
 Dilution Factor: 1      Prep Batch #: 5105107

<u>PARAMETER</u>	<u>REPORTING</u>			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	92	(67 - 130)
Toluene-d8	99	(83 - 115)
4-Bromofluorobenzene	91	(79 - 119)
Dibromofluoromethane	106	(88 - 119)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: I5D070180  
 MB Lot-Sample #: I5D180000-082  
 Analysis Date...: 04/15/05  
 Dilution Factor: 1

Work Order #....: G8KFK1AA  
 Prep Date.....: 04/15/05  
 Prep Batch #: 5108082

Matrix.....: WATER  
 Analysis Time.: 11:40

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
1, 2-Dichloroethane-d4	88	(67 - 130)	
Toluene-d8	99	(83 - 115)	
4-Bromofluorobenzene	89	(79 - 119)	
Dibromofluoromethane	103	(88 - 119)	

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: I5D070180

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>		<u>ORDER #</u>	
<b>MB Lot-Sample #: I5D120000-213 Prep Batch #...: 5102213</b>							
Calcium	ND	5.0	mg/L	SW846 6010B		04/12-04/13/05	G76QJ1A1
		Dilution Factor:	1				
		Analysis Time..:	10:04				
Magnesium	ND	5.0	mg/L	SW846 6010B		04/12-04/13/05	G76QJ1A2
		Dilution Factor:	1				
		Analysis Time..:	10:04				
Potassium	ND	5.0	mg/L	SW846 6010B		04/12-04/13/05	G76QJ1A3
		Dilution Factor:	1				
		Analysis Time..:	10:04				
Sodium	ND	5.0	mg/L	SW846 6010B		04/12-04/13/05	G76QJ1A4
		Dilution Factor:	1				
		Analysis Time..:	10:04				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## General Chemistry

Client Lot #....: I5D070180

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS				
Chloride	ND	Work Order #: G77LQ1AA 1.0	mg/L	MB Lot-Sample #: I5D120000-406 MCawan 300.0A		04/12/05	5102406
		Dilution Factor: 1					
		Analysis Time...: 08:34					
Sulfate	ND	Work Order #: G77LT1AA 1.0	mg/L	MB Lot-Sample #: I5D120000-407 MCawan 300.0A		04/12/05	5102407
		Dilution Factor: 1					
		Analysis Time...: 08:34					
Total Alkalinity	ND	Work Order #: G70K01AA 5.0	mg/L	MB Lot-Sample #: I5D080000-104 MCawan 310.1		04/08/05	5098104
		Dilution Factor: 1					
		Analysis Time...: 09:00					
Total Dissolved Solids	ND	Work Order #: G71WR1AA 40.0	mg/L	MB Lot-Sample #: I5D080000-339 MCawan 160.1		04/08/05	5098339
		Dilution Factor: 1					
		Analysis Time...: 10:30					

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: ISD070180      Work Order #...: G8FJ21AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: ISD150000-107      G8FJ21AD-LCSD  
 Prep Date.....: 04/14/05      Analysis Date...: 04/14/05  
 Prep Batch #...: 5105107      Analysis Time...: 09:52  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	
Benzene	97	(70 - 118)		SW846 8260B
	97	(70 - 118)	0.050 (0-20)	SW846 8260B
Ethylbenzene	96	(72 - 121)		SW846 8260B
	92	(72 - 121)	3.9 (0-20)	SW846 8260B
Toluene	104	(76 - 120)		SW846 8260B
	99	(76 - 120)	4.7 (0-20)	SW846 8260B
Xylenes (total)	97	(72 - 121)		SW846 8260B
	93	(72 - 121)	3.7 (0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	97	(75 - 115)	
	94	(75 - 115)	
Toluene-d8	101	(90 - 114)	
	101	(90 - 114)	
4-Bromofluorobenzene	94	(86 - 117)	
	91	(86 - 117)	
Dibromofluoromethane	108	(81 - 110)	
	107	(81 - 110)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5D070180      Work Order #....: G8KFK1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I5D180000-082    G8KFK1AD-LCSD  
 Prep Date.....: 04/15/05      Analysis Date...: 04/15/05  
 Prep Batch #....: 5108082      Analysis Time...: 08:47  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>		<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
Benzene	94	(70 - 118)			SW846 8260B
	92	(70 - 118)	2.3	(0-20)	SW846 8260B
Ethylbenzene	93	(72 - 121)			SW846 8260B
	89	(72 - 121)	4.7	(0-20)	SW846 8260B
Toluene	101	(76 - 120)			SW846 8260B
	97	(76 - 120)	3.9	(0-20)	SW846 8260B
Xylenes (total)	92	(72 - 121)			SW846 8260B
	89	(72 - 121)	3.4	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	87	(75 - 115)	
	92	(75 - 115)	
Toluene-d8	100	(90 - 114)	
	103	(90 - 114)	
4-Bromofluorobenzene	91	(86 - 117)	
	94	(86 - 117)	
Dibromofluoromethane	102	(81 - 110)	
	105	(81 - 110)	

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I5D070180

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>LCS Lot-Sample#:</b> I5D120000-213 <b>Prep Batch #....:</b> 5102213					
Calcium	99	(80 - 120)	SW846 6010B	04/12-04/13/05	G76QJ1CF
		Dilution Factor: 1		Analysis Time...:	10:10
Magnesium	97	(80 - 120)	SW846 6010B	04/12-04/13/05	G76QJ1CG
		Dilution Factor: 1		Analysis Time...:	10:10
Potassium	103	(80 - 120)	SW846 6010B	04/12-04/13/05	G76QJ1CH
		Dilution Factor: 1		Analysis Time...:	10:10
Sodium	98	(80 - 120)	SW846 6010B	04/12-04/13/05	G76QJ1CJ
		Dilution Factor: 1		Analysis Time...:	10:10

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT****General Chemistry****Lot-Sample #....:** I5D070180**Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP. BATCH #
Total Alkalinity		WO#:G70K01AC-LCS/G70K01AD-LCSD	LCS	Lot-Sample#: I5D080000-104			
102	(80 - 120)				MCAWW 310.1	04/08/05	5098104
103	(80 - 120)	1.2 (0-20)			MCAWW 310.1	04/08/05	5098104
		Dilution Factor: 1			Analysis Time..: 09:00		

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## General Chemistry

Client Lot #....: I5D070180

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP. BATCH #</u>
Chloride	96	Work Order #: G77LQ1AC (90 - 110)	LCS Lot-Sample#: I5D120000-406 MCAWW 300.0A	04/12/05	Analysis Time... 08:47 5102406
Sulfate	98	Work Order #: G77LT1AC (90 - 110)	LCS Lot-Sample#: I5D120000-407 MCAWW 300.0A	04/12/05	Analysis Time... 08:47 5102407
Total Dissolved Solids	97	Work Order #: G71WR1AC (87 - 113)	LCS Lot-Sample#: I5D080000-339 MCAWW 160.1	04/08/05	Analysis Time... 10:32 5098339

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5D070180      Work Order #....: G731L1AJ-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5D090160-011      G731L1AK-MSD  
 Date Sampled...: 04/07/05 08:50 Date Received..: 04/08/05 17:45  
 Prep Date.....: 04/14/05      Analysis Date...: 04/14/05  
 Prep Batch #....: 5105107      Analysis Time...: 10:52  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Benzene	103	(70 - 118)	0.26	(0-20)	SW846 8260B
	103	(70 - 118)			SW846 8260B
Ethylbenzene	100	(72 - 121)	0.0	(0-20)	SW846 8260B
	100	(72 - 121)			SW846 8260B
Toluene	106	(76 - 120)	1.8	(0-20)	SW846 8260B
	108	(76 - 120)			SW846 8260B
Xylenes (total)	99	(72 - 121)	1.0	(0-20)	SW846 8260B
	100	(72 - 121)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
2-Dichloroethane-d4	95	(67 - 130)	
	95	(67 - 130)	
Toluene-d8	102	(83 - 115)	
	102	(83 - 115)	
4-Bromofluorobenzene	92	(79 - 119)	
	96	(79 - 119)	
Dibromofluoromethane	106	(88 - 119)	
	108	(88 - 119)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE EVALUATION REPORT****GC/MS Volatiles**

Client Lot #....: I5D070180      Work Order #....: G7V341AN-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5D070180-001      G7V341AP-MSD  
 Date Sampled...: 04/05/05 10:00 Date Received...: 04/07/05 08:00  
 Prep Date.....: 04/15/05      Analysis Date...: 04/15/05  
 Prep Batch #....: 5108082      Analysis Time...: 09:53  
 Dilution Factor: 100

<u>PARAMETER</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMITS</u>	<u>METHOD</u>
Benzene	76	(70 - 118)	4.4	(0-20)	SW846 8260B
	90	(70 - 118)			SW846 8260B
Ethylbenzene	88	(72 - 121)	2.4	(0-20)	SW846 8260B
	90	(72 - 121)			SW846 8260B
Toluene	94	(76 - 120)	3.1	(0-20)	SW846 8260B
	97	(76 - 120)			SW846 8260B
Xylenes (total)	88	(72 - 121)	3.0	(0-20)	SW846 8260B
	90	(72 - 121)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
1,2-Dichloroethane-d4	88	(67 - 130)
	90	(67 - 130)
Toluene-d8	100	(83 - 115)
	99	(83 - 115)
4-Bromofluorobenzene	91	(79 - 119)
	91	(79 - 119)
Dibromofluoromethane	102	(88 - 119)
	101	(88 - 119)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.



## MATRIX SPIKE SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I5D070180

Matrix.....: WATER

Date Sampled...: 04/06/05 10:30 Date Received...: 04/07/05 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
<b>MS Lot-Sample #: I5D070149-001 Prep Batch #: 5102213</b>							
Calcium	90	(75 - 125)		SW846 6010B		04/12-04/13/05 G7VP21DA	
	94	(75 - 125) 1.7 (0-20)		SW846 6010B		04/12-04/13/05 G7VP21DC	
Dilution Factor: 1							
Analysis Time...: 11:19							
Magnesium	93	(75 - 125)		SW846 6010B		04/12-04/13/05 G7VP21DE	
	96	(75 - 125) 1.8 (0-20)		SW846 6010B		04/12-04/13/05 G7VP21DF	
Dilution Factor: 1							
Analysis Time...: 11:19							
Potassium	106	(75 - 125)		SW846 6010B		04/12-04/13/05 G7VP21DH	
	107	(75 - 125) 0.56 (0-20)		SW846 6010B		04/12-04/13/05 G7VP21DJ	
Dilution Factor: 1							
Analysis Time...: 11:19							
Sodium	92	(75 - 125)		SW846 6010B		04/12-04/13/05 G7VP21DL	
	95	(75 - 125) 0.86 (0-20)		SW846 6010B		04/12-04/13/05 G7VP21DM	
Dilution Factor: 1							
Analysis Time...: 11:19							

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE EVALUATION REPORT****General Chemistry**

Client Lot #...: I5D070180

Matrix.....: WATER

Date Sampled...: 04/06/05 09:35 Date Received..: 04/07/05 08:00

PARAMETER	PERCENT RECOVERY		RPD			METHOD	PREPARATION-		PREP ANALYSIS DATE	BATCH #
	RECOVERY	LIMITS	RPD	LIMITS			ANALYSIS	DATE		
Chloride		WO#: G7VQM1A6-MS/G7VQM1A7-MSD	MS	Lot-Sample #:	I5D070151-001					
	99	(90 - 110)		MCAWW	300.0A		04/12/05		5102406	
	92	(90 - 110) 3.7 (0-20)	MCAWW	300.0A			04/12/05		5102406	
		Dilution Factor: 1								
		Analysis Time..: 09:13								
Sulfate		WO#: G7VQM1A8-MS/G7VQM1A9-MSD	MS	Lot-Sample #:	I5D070151-001					
	90	(90 - 110)		MCAWW	300.0A		04/12/05		5102407	
	91	(90 - 110) 0.40 (0-20)	MCAWW	300.0A			04/12/05		5102407	
		Dilution Factor: 5								
		Analysis Time..: 12:00								

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**SAMPLE DUPLICATE EVALUATION REPORT****General Chemistry**

Client Lot #....: I5D070180      Work Order #....: G7GMD-SMP      Matrix.....: WATER  
  G7GMD-DUP

Date Sampled...: 03/30/05 17:25    Date Received..: 04/01/05 08:00

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity	33.9	35.0	mg/L	3.2	(0-20)	MCAWW 310.1	SD Lot-Sample #: I5D010138-024 04/08/05	Analysis Time... 09:00 5098104

**SAMPLE DUPLICATE EVALUATION REPORT****General Chemistry****Client Lot #....: I5D070180      Work Order #....: G7QKK-SMP      Matrix.....: WATER****G7QKK-DUP****Date Sampled...: 04/05/05 13:25      Date Received..: 04/06/05 08:00**

<u>PARAM</u>	<u>RESULT</u>	DUPLICATE			<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>	
		<u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>						<u>ANALYSIS DATE</u>
Total Dissolved Solids	46.0	ND	mg/L	19	(0-20)	MCAWW	160.1	SD Lot-Sample #: I5D060125-005	04/08/05	5098339
			Dilution Factor:	1			Analyeis Time..:	10:48		

### Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.

EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.

EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.

EPA 8151A: Laboratory utilizes alternate extraction solvent.

Iowa OAI: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.

EPA TO-12: Samples not analyzed in duplicate.

EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

### TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).

The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN  
TRENT

STL

## CHAIN-OF-CUSTODY ADDENDUM

RECEIVED BY: BJLot No: I 5D070180DATE/TIME RECEIVED: 4/7/05 0800

COC NUMBER: \_\_\_\_\_

UNPACKED DATE/TIME: 4/7/05 0930QUOTE/PROFILE: S3132CLIENT/PROJECT: MarinSAMPLES LOGGED IN: LJ LOG-IN REVIEWED: BJNumber of Shipping Containers Received  
with Chain of Custody 1VOC AIR / FILTER SAMPLES  YES SEE SECTIONS 1.0, 2.0, & 6.01.0 CONTAINERS EXAMINED UPON RECEIPT: BJContainer Sealed:  YES  NO Custody Seal Signed/Dated:  YES  NOCustody Seal Present:  YES  NO Containers checked for radioactivity:  YES  NO  N/A

If seal not intact or Geiger counter reading &gt;0.5 mR/hr, list air bill number of that container(s): \_\_\_\_\_

## 2.0 VOC CANISTERS EXAMINED UPON RECEIPT: \_\_\_\_\_

Canister Valves Closed:  YES  NO Samples Received Match Chain:  YES  NOCanister Valves Capped:  YES  NO Other Equipment Received:  YES  NOValve Cap Tightened Properly:  YES  NO See Additional Comments (Section 5.0 and / or 7.0)  YES  NOPacking Material Used: (circle) Chain-of-Custody form properly maintained:  YES  NONone / Absorbent / Paper / Bubble Wrap Can Size:  6L  15L Other \_\_\_\_\_3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: BJ IR THERMOMETER #: P.S.

Temperature of the container(s): \_\_\_\_\_

Circle selection: TB = Temp. Blank and/or SC = Sample Container [acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]

| TB |
|----|----|----|----|----|----|----|----|----|----|
| SC |

If temperature is outside acceptable tolerance, Project Manager was notified ( \_\_\_\_\_ PM). Date: \_\_\_\_\_ Time: \_\_\_\_\_

Samples received do not require cooling \_\_\_\_\_ OK to analyze samples:  YES  NOPRESERVATION OF SAMPLES REQUIRED:  NA  YES VERIFIED BY: BJBase samples are >pH 12:  YES  NO Acid preserved are <pH 2:  YES  NOCyanide samples checked for sulfides:  YES Sulfide samples appear to be preserved with zinc acetate:  YES  NOSamples checked for chlorine per specification (N.C.)  YES Free chlorine present:  YES  NO

If sample preservation is outside acceptable tolerance, Project Manager was notified ( \_\_\_\_\_ PM)

Date: \_\_\_\_\_ Time: \_\_\_\_\_  see pH adjustment form

## VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace	Sample ID	mm Headspace

**4.0 CONDITION OF BOTTLES/CONTAINERS**

VERIFIED BY: *[Signature]*

Samples received match COC:

YES  NO

Bottles received intact:

YES  NO

See additional discrepancies/comments section:

YES  NO

Samples received from USDA restricted area:

YES  NO

Chain-of-Custody form properly maintained:

YES  NO

VOA trip blanks included: *(X)*

YES  NO  N/A

**5.0 ADDITIONAL DISCREPANCIES**

Appears on COC		Appears on Label		
Sample ID	Date/Time	Sample ID	Date/Time	Comments

**6.0 SHIPPING DOCUMENTATION:**

Air/freight bill is available and attached to COC:  YES  NO Air bill #: \_\_\_\_\_

Hand-delivered Carrier: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

**7.0 OTHER COMMENTS:**

Made 125ml split for 6010B.

**CORRECTIVE ACTION:**

Client's Name: \_\_\_\_\_

Informed verbally on: \_\_\_\_\_

By: \_\_\_\_\_

Client's Name: \_\_\_\_\_

Informed verbally on: \_\_\_\_\_

By: \_\_\_\_\_

Sample(s) processed "as is" comments: \_\_\_\_\_

Samples(s) on hold until: \_\_\_\_\_

If released, notify: \_\_\_\_\_

**REVIEW:**

Project Management: *[Signature]* Date: *4-7-05*

**SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE**



SEVERN  
TRENT **STL**

**Certificate of Analysis**

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**ANALYTICAL REPORT**

PROJECT NO. **MAIJAMAR NM**  
**6519 Maljamar Gas Plant**  
**Lot #: ISE140132**

**Greg Pope**

**Maxim Technologies  
1703 W Industrial Ave  
Midland, TX 79701**

**SEVERN TRENT LABORATORIES, INC.**

*Carla Butler*  
**Carla M. Butler**  
**Project Manager**

**May 31, 2005**

American Council of Independent Laboratories  
International Association of Environmental Testing Laboratories

**Case Narrative****STL LOT NUMBER: I5E140132**

This report contains the analytical results for the **18** samples received under chain of custody by Severn Trent Laboratories (STL) on May 14, 2005. These samples are associated with your **6519 Maljamar Gas Plant** project.

All samples were received in good condition and within temperature requirements with the exception of Trip Blank 2 that was not received and one liter for MW-10 that was received broken.

Recoveries of calcium were not calculated for the Matrix Spike/Matrix Spike Duplicate of sample 001 because the native concentration was greater than four times the spike amount. Recoveries of chloride and sulfate were outside limits for the Matrix Spike Duplicate of sample 012.

All applicable quality control procedures met method-specified acceptance criteria except where noted in the case narrative or flagged on the result pages.

This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions, please feel free to call me at (512) 244-0855.

**EXECUTIVE SUMMARY - Detection Highlights**

15E140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-2 05/13/05 12:45 001</b>				
Calcium	223	5.0	mg/L	SW846 6010B
Magnesium	42.0	5.0	mg/L	SW846 6010B
Sodium	61.1	5.0	mg/L	SW846 6010B
Benzene	51000	2000	ug/L	SW846 8260B
Toluene	13000	2000	ug/L	SW846 8260B
Total Dissolved Solids	1520	40.0	mg/L	MCAWW 160.1
Chloride	346	100	mg/L	MCAWW 300.0A
Sulfate	23.3	5.0	mg/L	MCAWW 300.0A
Bicarbonate	290	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	290	5.0	mg/L	MCAWW 310.1
<b>MW-4 05/13/05 11:05 002</b>				
Calcium	156	5.0	mg/L	SW846 6010B
Magnesium	48.2	5.0	mg/L	SW846 6010B
Potassium	8.2	5.0	mg/L	SW846 6010B
Sodium	77.4	5.0	mg/L	SW846 6010B
Benzene	8.6	1.0	ug/L	SW846 8260B
Ethylbenzene	31	1.0	ug/L	SW846 8260B
Xylenes (total)	56	3.0	ug/L	SW846 8260B
Total Dissolved Solids	1330	40.0	mg/L	MCAWW 160.1
Chloride	397	100	mg/L	MCAWW 300.0A
Bicarbonate	169	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	169	5.0	mg/L	MCAWW 310.1
<b>MW-6 05/13/05 08:40 003</b>				
Calcium	155	5.0	mg/L	SW846 6010B
Magnesium	70.6	5.0	mg/L	SW846 6010B
Sodium	81.7	5.0	mg/L	SW846 6010B
Benzene	4800	200	ug/L	SW846 8260B
Ethylbenzene	220	200	ug/L	SW846 8260B
Total Dissolved Solids	1330	40.0	mg/L	MCAWW 160.1
Chloride	396	100	mg/L	MCAWW 300.0A
Sulfate	12.1	5.0	mg/L	MCAWW 300.0A
Bicarbonate	231	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	231	5.0	mg/L	MCAWW 310.1

(Continued on next page)

**EXECUTIVE SUMMARY - Detection Highlights**

I5E140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-8 05/13/05 14:15 005</b>				
Calcium	201	5.0	mg/L	SW846 6010B
Magnesium	48.1	5.0	mg/L	SW846 6010B
Sodium	38.9	5.0	mg/L	SW846 6010B
Naphthalene	9.7	9.7	ug/L	SW846 8270C
Benzene	22000	500	ug/L	SW846 8260B
Toluene	1900	500	ug/L	SW846 8260B
Total Dissolved Solids	1470	40.0	mg/L	MCAWW 160.1
Chloride	410	100	mg/L	MCAWW 300.0A
Bicarbonate	163	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	163	5.0	mg/L	MCAWW 310.1
<b>MW-10 05/12/05 15:43 006</b>				
Calcium	811	5.0	mg/L	SW846 6010B
Magnesium	210	5.0	mg/L	SW846 6010B
Potassium	9.9	5.0	mg/L	SW846 6010B
Sodium	791	50.0	mg/L	SW846 6010B
Total Dissolved Solids	7560	40.0	mg/L	MCAWW 160.1
Chloride	3140	1000	mg/L	MCAWW 300.0A
Sulfate	368	100	mg/L	MCAWW 300.0A
Bicarbonate	169	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	169	5.0	mg/L	MCAWW 310.1
<b>MW-11 05/12/05 08:48 007</b>				
Calcium	785	5.0	mg/L	SW846 6010B
Magnesium	226	5.0	mg/L	SW846 6010B
Potassium	7.0	5.0	mg/L	SW846 6010B
Sodium	265	50.0	mg/L	SW846 6010B
Total Dissolved Solids	5930	40.0	mg/L	MCAWW 160.1
Chloride	2760	500	mg/L	MCAWW 300.0A
Sulfate	209	100	mg/L	MCAWW 300.0A
Bicarbonate	191	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	191	5.0	mg/L	MCAWW 310.1

(Continued on next page)

**EXECUTIVE SUMMARY - Detection Highlights**

I5E140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-12 05/13/05 09:48 008</b>				
Calcium	5140	50.0	mg/L	SW846 6010B
Magnesium	1480	50.0	mg/L	SW846 6010B
Potassium	142	50.0	mg/L	SW846 6010B
Sodium	30100	1000	mg/L	SW846 6010B
Total Dissolved Solids	118000	40.0	mg/L	MCAWW 160.1
Chloride	64200	10000	mg/L	MCAWW 300.0A
Sulfate	1590	500	mg/L	MCAWW 300.0A
Bicarbonate	75.4	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	75.4	5.0	mg/L	MCAWW 310.1
<b>MW-13 05/11/05 13:52 009</b>				
Calcium	183	5.0	mg/L	SW846 6010B
Magnesium	43.5	5.0	mg/L	SW846 6010B
Sodium	55.8	5.0	mg/L	SW846 6010B
Total Dissolved Solids	1140	40.0	mg/L	MCAWW 160.1
Chloride	204	100	mg/L	MCAWW 300.0A
Sulfate	217	100	mg/L	MCAWW 300.0A
Bicarbonate	204	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	204	5.0	mg/L	MCAWW 310.1
<b>MW-14 05/12/05 10:08 010</b>				
Calcium	536	5.0	mg/L	SW846 6010B
Magnesium	170	5.0	mg/L	SW846 6010B
Potassium	6.1	5.0	mg/L	SW846 6010B
Sodium	62.6	5.0	mg/L	SW846 6010B
Total Dissolved Solids	4260	40.0	mg/L	MCAWW 160.1
Chloride	1080	200	mg/L	MCAWW 300.0A
Sulfate	427	100	mg/L	MCAWW 300.0A
Bicarbonate	180	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	180	5.0	mg/L	MCAWW 310.1

(Continued on next page)

**EXECUTIVE SUMMARY - Detection Highlights**

I5R140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-15 05/11/05 16:00 011</b>				
Calcium	114	5.0	mg/L	SW846 6010B
Magnesium	50.9	5.0	mg/L	SW846 6010B
Sodium	49.8	5.0	mg/L	SW846 6010B
Benzene	2.5	1.0	ug/L	SW846 8260B
Total Dissolved Solids	808	40.0	mg/L	MCAWW 160.1
Chloride	218	100	mg/L	MCAWW 300.0A
Sulfate	42.0	10.0	mg/L	MCAWW 300.0A
Bicarbonate	206	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	258	5.0	mg/L	MCAWW 310.1
<b>MW-16 05/11/05 18:10 012</b>				
Calcium	192	5.0	mg/L	SW846 6010B
Magnesium	55.5	5.0	mg/L	SW846 6010B
Sodium	75.2	5.0	mg/L	SW846 6010B
Total Dissolved Solids	1220	40.0	mg/L	MCAWW 160.1
Chloride	293	100	mg/L	MCAWW 300.0A
Sulfate	157	100	mg/L	MCAWW 300.0A
Bicarbonate	258	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	223	5.0	mg/L	MCAWW 310.1
<b>MW-17 05/12/05 17:42 013</b>				
Calcium	417	5.0	mg/L	SW846 6010B
Magnesium	91.1	5.0	mg/L	SW846 6010B
Sodium	251	50.0	mg/L	SW846 6010B
Total Dissolved Solids	3700	40.0	mg/L	MCAWW 160.1
Chloride	1020	100	mg/L	MCAWW 300.0A
Sulfate	278	100	mg/L	MCAWW 300.0A
Bicarbonate	127	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	127	5.0	mg/L	MCAWW 310.1
<b>MW-18 05/12/05 14:27 014</b>				
Calcium	2370	50.0	mg/L	SW846 6010B
Magnesium	755	5.0	mg/L	SW846 6010B
Potassium	37.8	5.0	mg/L	SW846 6010B

(Continued on next page)

**EXECUTIVE SUMMARY - Detection Highlights**

I5E140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>MW-18 05/12/05 14:27 014</b>				
Sodium	3410	500	mg/L	SW846 6010B
Total Dissolved Solids	21800	40.0	mg/L	MCAWW 160.1
Chloride	10700	5000	mg/L	MCAWW 300.0A
Sulfate	756	100	mg/L	MCAWW 300.0A
Bicarbonate	113	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	113	5.0	mg/L	MCAWW 310.1
<b>MW-19 05/12/05 11:45 015</b>				
Calcium	215	5.0	mg/L	SW846 6010B
Magnesium	44.4	5.0	mg/L	SW846 6010B
Potassium	8.2	5.0	mg/L	SW846 6010B
Sodium	48.0	5.0	mg/L	SW846 6010B
Total Dissolved Solids	704	40.0	mg/L	MCAWW 160.1
Chloride	145	100	mg/L	MCAWW 300.0A
Sulfate	25.8	10.0	mg/L	MCAWW 300.0A
Bicarbonate	286	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	286	5.0	mg/L	MCAWW 310.1
<b>MW-20 05/12/05 13:10 016</b>				
Calcium	719	5.0	mg/L	SW846 6010B
Magnesium	270	5.0	mg/L	SW846 6010B
Potassium	14.7	5.0	mg/L	SW846 6010B
Sodium	499	50.0	mg/L	SW846 6010B
Total Dissolved Solids	6620	40.0	mg/L	MCAWW 160.1
Chloride	2780	1000	mg/L	MCAWW 300.0A
Sulfate	231	100	mg/L	MCAWW 300.0A
Bicarbonate	90.4	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	90.4	5.0	mg/L	MCAWW 310.1
<b>DUPLICATE 05/13/05 14:15 017</b>				
Calcium	207	5.0	mg/L	SW846 6010B
Magnesium	49.6	5.0	mg/L	SW846 6010B
Sodium	41.6	5.0	mg/L	SW846 6010B
Naphthalene	11	9.6	ug/L	SW846 8270C

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**EXECUTIVE SUMMARY - Detection Highlights**

I5B140132

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
<b>DUPPLICATE 05/13/05 14:15 017</b>				
Benzene	23000	1000	ug/L	SW846 8260B
Toluene	2000	1000	ug/L	SW846 8260B
Total Dissolved Solids	2650	40.0	mg/L	MCAWW 160.1
Chloride	408	100	mg/L	MCAWW 300.0A
Bicarbonate	182	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	182	5.0	mg/L	MCAWW 310.1
<b>WW 05/13/05 08:12 018</b>				
Calcium	215	5.0	mg/L	SW846 6010B
Magnesium	70.7	5.0	mg/L	SW846 6010B
Sodium	147	5.0	mg/L	SW846 6010B
Ethylbenzene	2.6	1.0	ug/L	SW846 8260B
Total Dissolved Solids	1970	40.0	mg/L	MCAWW 160.1
Chloride	519	100	mg/L	MCAWW 300.0A
Sulfate	158	100	mg/L	MCAWW 300.0A
Bicarbonate	201	5.0	mg/L	MCAWW 310.1
Alkalinity				
Total Alkalinity	201	5.0	mg/L	MCAWW 310.1

## PREPARATION METHODS SUMMARY

I5E140132

<u>PREPARATION DESCRIPTION</u>	<u>PREPARATION METHOD</u>	<u>ANALYTICAL METHOD</u>
Acid Digestion for Total Recoverable Metals Chloride	SW846 3005A MCAWW 300.0A	SW846 6010B MCAWW 300.0A
Continuous Liquid-Liquid Extraction	SW846 3520C	SW846 8270C
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Potentiometric titration to preselected pH	MCAWW 310.1	MCAWW 310.1
Result obtained by calculation	MCAWW 310.1	MCAWW 310.1
Sulfate	MCAWW 300.0A	MCAWW 300.0A
15 mL Purge-and-Trap	SW846 5030B/826	SW846 8260B

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

**METHOD / ANALYST SUMMARY**

I5E140132

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 160.1	Michael Sarmir	401945
MCAWW 300.0A	David A. Tocher	800002
MCAWW 310.1	David A. Tocher	800002
MCAWW 310.1	Robert D. O'Keefe	038036
SW846 6010B	Hamid Davoudi	038010
SW846 8260B	David Yancey	014906
SW846 8270C	Mark Malloy	001515

**References:**

MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.

**SAMPLE SUMMARY**

I5E140132

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
HAJ79	001	MW-2	05/13/05	12:45
HAJ8D	002	MW-4	05/13/05	11:05
HAJ8E	003	MW-6	05/13/05	08:40
HAJ8G	004	TRIP BLANK 1	05/13/05	15:00
HAJ8J	005	MW-8	05/13/05	14:15
HAJ8N	006	MW-10	05/12/05	15:43
HAJ8R	007	MW-11	05/12/05	08:48
HAJ8V	008	MW-12	05/13/05	09:48
HAJ8X	009	MW-13	05/11/05	13:52
HAJ81	010	MW-14	05/12/05	10:08
HAJ82	011	MW-15	05/11/05	16:00
HAJ84	012	MW-16	05/11/05	18:10
HAJ85	013	MW-17	05/12/05	17:42
HAJ87	014	MW-18	05/12/05	14:27
HAJ88	015	MW-19	05/12/05	11:45
HAJ89	016	MW-20	05/12/05	13:10
HAJ9A	017	DUPLICATE	05/13/05	14:15
HAJ9D	018	WW	05/13/05	08:12

**NOTE (S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

**QC DATA ASSOCIATION SUMMARY**

15B140132

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5138384	5138241
	WATER	MCAWW 300.0A		5138382	5138240
	WATER	SW846 8260B		5140108	5140087
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
002	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5138384	5138241
	WATER	MCAWW 300.0A		5138382	5138240
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
003	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5138384	5138241
	WATER	MCAWW 300.0A		5138382	5138240
	WATER	SW846 8260B		5143343	5143235
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
004	WATER	SW846 8260B		5137137	5137095
005	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5138384	5138241
	WATER	MCAWW 300.0A		5138382	5138240
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY**

ISE140132

**Sample Preparation and Analysis Control Numbers**

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
006	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5138384	5138241
	WATER	MCAWW 300.0A		5138382	5138240
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
007	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5140108	5140087
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
008	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
009	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5136234	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5136233	
	WATER	MCAWW 310.1		5136230	5136138
010	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216

(Continued on next page)

**QC DATA ASSOCIATION SUMMARY**

I5E140132

## Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
010	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
011	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5136234	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5137137	5137095
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5136233	
	WATER	MCAWW 310.1		5136230	5136138
012	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5136234	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5140152	5140117
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5136233	
	WATER	MCAWW 310.1		5136230	5136138
013	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5140152	5140117
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
014	WATER	MCAWW 160.1		5139495	5139303
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5140152	5140117
	WATER	SW846 8270C		5137085	5137066

(Continued on next page)

## QC DATA ASSOCIATION SUMMARY

I5E140132

### Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
014	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
015	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5138090	5138058
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
016	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5138090	5138058
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
017	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5140108	5140087
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368
018	WATER	MCAWW 160.1		5139499	5139306
	WATER	MCAWW 310.1		5144245	
	WATER	MCAWW 300.0A		5139350	5139216
	WATER	MCAWW 300.0A		5139352	5139214
	WATER	SW846 8260B		5138090	5138058
	WATER	SW846 8270C		5137085	5137066
	WATER	SW846 6010B		5138337	5138211
	WATER	MCAWW 310.1		5144246	
	WATER	MCAWW 310.1		5140560	5140368

ConocoPhillips Co.

Client Sample ID: MW-2

## GC/MS Volatiles

Lot-Sample #....: I5E140132-001    Work Order #....: HAJ791AD    Matrix.....: WATER  
 Date Sampled....: 05/13/05 12:45    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/19/05    Analysis Date...: 05/19/05  
 Prep Batch #....: 5140108    Analysis Time...: 22:25  
 Dilution Factor: 2000

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	<b>51000</b>	<b>2000</b>	ug/L
Ethylbenzene	ND	2000	ug/L
Toluene	<b>13000</b>	<b>2000</b>	ug/L
Xylenes (total)	ND	6000	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	91	(67 - 130)
Toluene-d8	96	(83 - 115)
4-Bromofluorobenzene	92	(79 - 119)
Dibromofluoromethane	89	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-2

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-001 Work Order #....: HAJ791AN Matrix.....: WATER  
 Date Sampled....: 05/13/05 12:45 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/21/05  
 Prep Batch #....: 5137085 Analysis Time...: 00:55  
 Dilution Factor: 4.8

Method.....: SW846 8270C

<u>PARAMETER</u>	REPORTING		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	48	ug/L
Acenaphthylene	ND	48	ug/L
Anthracene	ND	48	ug/L
Benzo (a) anthracene	ND	48	ug/L
Benzo (a)pyrene	ND	48	ug/L
Benzo (b) fluoranthene	ND	48	ug/L
Benzo (ghi)perylene	ND	48	ug/L
Benzo (k) fluoranthene	ND	48	ug/L
Chrysene	ND	48	ug/L
Dibenz (a, h) anthracene	ND	48	ug/L
Fluoranthene	ND	48	ug/L
Fluorene	ND	48	ug/L
Indeno (1, 2, 3-cd)pyrene	ND	48	ug/L
Naphthalene	ND	48	ug/L
Phenanthrene	ND	48	ug/L
Pyrene	ND	48	ug/L

<u>SURROGATE</u>	PERCENT		RECOVERY
	<u>RECOVERY</u>	<u>LIMITS</u>	
Nitrobenzene-d5	84 DIL	(28 - 120)	
2-Fluorobiphenyl	91 DIL	(23 - 119)	
Terphenyl-d14	88 DIL	(10 - 123)	
2-Fluorophenol	74 DIL	(22 - 121)	
Phenol-d5	100 DIL	(34 - 117)	
2, 4, 6-Tribromophenol	97 DIL	(33 - 124)	

NOTE (S) :

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Elevated reporting limits due to the presence of high level non-target analytes.

ConocoPhillips Co.

Client Sample ID: MW-2

## TOTAL Metals

Lot-Sample #....: I5E140132-001

Matrix.....: WATER

Date Sampled....: 05/13/05 12:45 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>		<u>ORDER #</u>	
<b>Prep Batch #....: 5138337</b>							
Calcium	223	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ791AJ	
		Dilution Factor:	1	Analysis Time...:	18:18		
Magnesium	42.0	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ791AK	
		Dilution Factor:	1	Analysis Time...:	18:18		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ791AL	
		Dilution Factor:	1	Analysis Time...:	18:18		
Sodium	61.1	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ791AM	
		Dilution Factor:	1	Analysis Time...:	18:18		

ConocoPhillips Co.

Client Sample ID: MW-2

## General Chemistry

Lot-Sample #....: I5E140132-001    Work Order #....: HAJ79    Matrix.....: WATER  
 Date Sampled...: 05/13/05 12:45    Date Received..: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	290	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	346	100	mg/L	MCAWW 300.0A	05/18/05	5138384
		Dilution Factor: 100		Analysis Time...: 11:24		
Sulfate	23.3	5.0	mg/L	MCAWW 300.0A	05/18/05	5138382
		Dilution Factor: 5		Analysis Time...: 14:25		
Total Alkalinity	290	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:08		
Total Dissolved Solids	1520	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:10		

ConocoPhillips Co.

Client Sample ID: MW-4

## GC/MS Volatiles

Lot-Sample #....: I5E140132-002    Work Order #....: HAJ8D1AD    Matrix.....: WATER  
 Date Sampled....: 05/13/05 11:05    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137    Analysis Time...: 16:12  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	8.6	1.0	ug/L
Ethylbenzene	31	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	56	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	93	(67 - 130)
Toluene-d8	102	(83 - 115)
4-Bromofluorobenzene	96	(79 - 119)
Dibromofluoromethane	93	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-4

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-002    Work Order #....: HAJ8DLAN    Matrix.....: WATER  
 Date Sampled....: 05/13/05 11:05    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085    Analysis Time...: 16:41  
 Dilution Factor: 0.97

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND		9.7	ug/L
Acenaphthylene	ND		9.7	ug/L
Anthracene	ND		9.7	ug/L
Benzo (a) anthracene	ND		9.7	ug/L
Benzo (a) pyrene	ND		9.7	ug/L
Benzo (b) fluoranthene	ND		9.7	ug/L
Benzo (ghi) perylene	ND		9.7	ug/L
Benzo (k) fluoranthene	ND		9.7	ug/L
Chrysene	ND		9.7	ug/L
Dibenz(a, h) anthracene	ND		9.7	ug/L
Fluoranthene	ND		9.7	ug/L
Fluorene	ND		9.7	ug/L
Indeno(1,2,3-cd) pyrene	ND		9.7	ug/L
Naphthalene	ND		9.7	ug/L
Phenanthrene	ND		9.7	ug/L
Pyrene	ND		9.7	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	76	(28 - 120)
2-Fluorobiphenyl	75	(23 - 119)
Terphenyl-d14	75	(10 - 123)
2-Fluorophenol	67	(22 - 121)
Phenol-d5	73	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-4

## TOTAL Metals

Lot-Sample #....: I5E140132-002

Matrix.....: WATER

Date Sampled...: 05/13/05 11:05 Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 5138337</b>						
Calcium	156	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8D1AJ	
		Dilution Factor: 1		Analysis Time...: 18:46		
Magnesium	48.2	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8D1AK	
		Dilution Factor: 1		Analysis Time...: 18:46		
Potassium	8.2	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8D1AL	
		Dilution Factor: 1		Analysis Time...: 18:46		
Sodium	77.4	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8D1AM	
		Dilution Factor: 1		Analysis Time...: 18:46		

ConocoPhillips Co.

Client Sample ID: MW-4

**General Chemistry**

**Lot-Sample #....:** I5E140132-002    **Work Order #....:** HAJ8D    **Matrix.....:** WATER  
**Date Sampled...:** 05/13/05 11:05    **Date Received...:** 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Bicarbonate Alkalinity	169	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	397	100	mg/L	MCAWW 300.0A	05/18/05	5138384
		Dilution Factor: 100		Analysis Time...: 10:07		
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	05/18/05	5138382
		Dilution Factor: 1		Analysis Time...: 13:33		
Total Alkalinity	169	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:13		
Total Dissolved Solids	1330	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:12		

ConocoPhillips Co.

Client Sample ID: MW-6

## GC/MS Volatiles

Lot-Sample #....: I5E140132-003 Work Order #....: HAJ8E2AD Matrix.....: WATER  
Date Sampled....: 05/13/05 08:40 Date Received...: 05/14/05 08:45  
Prep Date.....: 05/20/05 Analysis Date...: 05/20/05  
Prep Batch #....: 5143343 Analysis Time...: 19:13  
Dilution Factor: 200

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	4800	200	ug/L
Ethylbenzene	220	200	ug/L
Toluene	ND	200	ug/L
Xylenes (total)	ND	600	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	94	(67 - 130)
Toluene-d8	97	(83 - 115)
4-Bromofluorobenzene	94	(79 - 119)
Dibromofluoromethane	94	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-6

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-003 Work Order #....: HAJ8E1AN Matrix.....: WATER  
 Date Sampled....: 05/13/05 08:40 Date Received..: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time..: 17:12  
 Dilution Factor: 0.98

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.8	ug/L
Acenaphthylene	ND	9.8	ug/L
Anthracene	ND	9.8	ug/L
Benzo (a) anthracene	ND	9.8	ug/L
Benzo (a) pyrene	ND	9.8	ug/L
Benzo (b) fluoranthene	ND	9.8	ug/L
Benzo (ghi)perylene	ND	9.8	ug/L
Benzo (k) fluoranthene	ND	9.8	ug/L
Chrysene	ND	9.8	ug/L
Dibenz (a, h) anthracene	ND	9.8	ug/L
Fluoranthene	ND	9.8	ug/L
Fluorene	ND	9.8	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.8	ug/L
Naphthalene	ND	9.8	ug/L
Phenanthrene	ND	9.8	ug/L
Pyrene	ND	9.8	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	85	(28 - 120)
2-Fluorobiphenyl	80	(23 - 119)
Terphenyl-d14	81	(10 - 123)
2-Fluorophenol	82	(22 - 121)
Phenol-d5	82	(34 - 117)
2, 4, 6-Tribromophenol	92	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-6

## TOTAL Metals

Lot-Sample #...: I5E140132-003

Matrix.....: WATER

Date Sampled...: 05/13/05 08:40 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 5138337						
Calcium	155	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8E1AJ	
		Dilution Factor: 1		Analysis Time..: 18:52		
Magnesium	70.6	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8E1AK	
		Dilution Factor: 1		Analysis Time..: 18:52		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8E1AL	
		Dilution Factor: 1		Analysis Time..: 18:52		
Sodium	81.7	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8E1AM	
		Dilution Factor: 1		Analysis Time..: 18:52		

ConocoPhillips Co.

Client Sample ID: MW-6

## General Chemistry

Lot-Sample #....: I5E140132-003    Work Order #....: HAJ8E    Matrix.....: WATER  
 Date Sampled...: 05/13/05 08:40    Date Received..: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	231	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	396	100	mg/L	MCAWW 300.0A	05/18/05	5138384
		Dilution Factor: 100		Analysis Time...: 10:45		
Sulfate	12.1	5.0	mg/L	MCAWW 300.0A	05/18/05	5138382
		Dilution Factor: 5		Analysis Time...: 16:21		
Total Alkalinity	231	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:18		
Total Dissolved Solids	1330	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:14		

## ConocoPhillips Co.

Client Sample ID: TRIP BLANK 1

## GC/MS Volatiles

Lot-Sample #....: 15E140132-004 Work Order #....: HAJ8G1AA Matrix.....: WATER  
 Date Sampled....: 05/13/05 15:00 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137 Analysis Time...: 16:35  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	88	(67 - 130)
Toluene-d8	95	(83 - 115)
4-Bromofluorobenzene	94	(79 - 119)
Dibromofluoromethane	91	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-8

## GC/MS Volatiles

Lot-Sample #...: I5E140132-005 Work Order #...: HAJ8J1AD Matrix.....: WATER  
 Date Sampled...: 05/13/05 14:15 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #...: 5137137 Analysis Time...: 16:57  
 Dilution Factor: 500

Method.....: SW846 8260B

<u>PARAMETER</u>	REPORTING		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	22000	500	ug/L
Ethylbenzene	ND	500	ug/L
Toluene	1900	500	ug/L
Xylenes (total)	ND	1500	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	90	(67 - 130)
Toluene-d8	95	(83 - 115)
4-Bromofluorobenzene	93	(79 - 119)
Dibromofluoromethane	92	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-8

GC/MS Semivolatiles

Lot-Sample #....: I5E140132-005 Work Order #....: HAJ8J1AN Matrix.....: WATER  
 Date Sampled....: 05/13/05 14:15 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 17:43  
 Dilution Factor: 0.97

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND		9.7	ug/L
Acenaphthylene	ND		9.7	ug/L
Anthracene	ND		9.7	ug/L
Benzo (a)anthracene	ND		9.7	ug/L
Benzo (a)pyrene	ND		9.7	ug/L
Benzo (b)fluoranthene	ND		9.7	ug/L
Benzo (ghi)perylene	ND		9.7	ug/L
Benzo (k)fluoranthene	ND		9.7	ug/L
Chrysene	ND		9.7	ug/L
Dibenz (a,h)anthracene	ND		9.7	ug/L
Fluoranthene	ND		9.7	ug/L
Fluorene	ND		9.7	ug/L
Indeno (1,2,3-cd)pyrene	ND		9.7	ug/L
Naphthalene	9.7		9.7	ug/L
Phenanthrene	ND		9.7	ug/L
Pyrene	ND		9.7	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	88		(28 - 120)
2-Fluorobiphenyl	86		(23 - 119)
Terphenyl-d14	87		(10 - 123)
2-Fluorophenol	77		(22 - 121)
Phenol-d5	91		(34 - 117)
2,4,6-Tribromophenol	97		(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-8

## TOTAL Metals

Lot-Sample #....: I5E140132-005

Matrix.....: WATER

Date Sampled...: 05/13/05 14:15 Date Received..: 05/14/05 08:45

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
<b>Prep Batch #....: 5138337</b>						
Calcium	201	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8J1AJ	
		Dilution Factor: 1		Analysis Time...: 18:57		
Magnesium	48.1	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8J1AK	
		Dilution Factor: 1		Analysis Time...: 18:57		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8J1AL	
		Dilution Factor: 1		Analysis Time...: 18:57		
Sodium	38.9	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ8J1AM	
		Dilution Factor: 1		Analysis Time...: 18:57		

ConocoPhillips Co.

Client Sample ID: MW-8

## General Chemistry

Lot-Sample #....: I5E140132-005    Work Order #....: HAJ8J    Matrix.....: WATER  
 Date Sampled...: 05/13/05 14:15    Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	163	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	410	100	mg/L	MCAWW 300.0A	05/18/05	5138384
		Dilution Factor: 100		Analysis Time...: 10:58		
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	05/18/05	5138382
		Dilution Factor: 1		Analysis Time...: 13:59		
Total Alkalinity	163	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:32		
Total Dissolved Solids	1470	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:16		

ConocoPhillips Co.

Client Sample ID: MW-10

## GC/MS Volatiles

**Lot-Sample #....:** I5E140132-006    **Work Order #....:** HAJ8N1AD    **Matrix.....:** WATER  
**Date Sampled....:** 05/12/05 15:43    **Date Received...:** 05/14/05 08:45  
**Prep Date.....:** 05/16/05    **Analysis Date...:** 05/16/05  
**Prep Batch #....:** 5137137    **Analysis Time...:** 17:20  
**Dilution Factor:** 1

**Method.....:** SW846 8260B

<b>PARAMETER</b>	<b>REPORTING</b>		
	<b>RESULT</b>	<b>LIMIT</b>	<b>UNITS</b>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>
	<b>RECOVERY</b>	<b>LIMITS</b>
1,2-Dichloroethane-d4	91	(67 - 130)
Toluene-d8	95	(83 - 115)
4-Bromofluorobenzene	96	(79 - 119)
Dibromofluoromethane	91	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-10

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-006 Work Order #....: HAJ8N1AN Matrix.....: WATER  
 Date Sampled...: 05/12/05 15:43 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 18:14  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a) anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b) fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k) fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno (1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	72	(28 - 120)
2-Fluorobiphenyl	74	(23 - 119)
Terphenyl-d14	82	(10 - 123)
2-Fluorophenol	67	(22 - 121)
Phenol-d5	70	(34 - 117)
2,4,6-Tribromophenol	88	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-10

## TOTAL Metals

Lot-Sample #....: ISE140132-006

Matrix.....: WATER

Date Sampled...: 05/12/05 15:43 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>			<u>ANALYSIS DATE</u>	<u>ORDER #</u>
<b>Prep Batch #....: 5138337</b>						
Calcium	811	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8N1AJ
		Dilution Factor: 1		Analysis Time...: 19:14		
Magnesium	210	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8N1AK
		Dilution Factor: 1		Analysis Time...: 19:14		
Potassium	9.9	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8N1AL
		Dilution Factor: 1		Analysis Time...: 19:14		
Sodium	791	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ8N1AM
		Dilution Factor: 10		Analysis Time...: 10:53		

ConocoPhillips Co.

Client Sample ID: MW-10

## General Chemistry

Lot-Sample #....: ISE140132-006    Work Order #....: HAJ8N    Matrix.....: WATER  
 Date Sampled...: 05/12/05 15:43    Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	169	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	3140	1000	mg/L	MCAWW 300.0A	05/18/05	5138384
		Dilution Factor: 1000		Analysis Time...: 14:12		
Sulfate	368	100	mg/L	MCAWW 300.0A	05/18/05	5138382
		Dilution Factor: 100		Analysis Time...: 11:11		
Total Alkalinity	169	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:28		
Total Dissolved Solids	7560	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:34		

ConocoPhillips Co.

Client Sample ID: MW-11

## GC/MS Volatiles

Lot-Sample #....: I5E140132-007 Work Order #....: HAJ8R1AD Matrix.....: WATER  
 Date Sampled...: 05/12/05 08:48 Date Received..: 05/14/05 08:45  
 Prep Date.....: 05/19/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5140108 Analysis Time...: 00:40  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	99	(67 - 130)
Toluene-d8	105	(83 - 115)
4-Bromofluorobenzene	79	(79 - 119)
Dibromofluoromethane	94	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-11

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-007    Work Order #....: HAJ8R1AN    Matrix.....: WATER  
 Date Sampled....: 05/12/05 08:48    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085    Analysis Time...: 18:45  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a)anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b)fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a, h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	83	(28 - 120)
2-Fluorobiphenyl	82	(23 - 119)
Terphenyl-d14	83	(10 - 123)
2-Fluorophenol	78	(22 - 121)
Phenol-d5	79	(34 - 117)
2, 4, 6-Tribromophenol	92	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-11

## TOTAL Metals

Lot-Sample #....: ISE140132-007

Matrix.....: WATER

Date Sampled....: 05/12/05 08:48 Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u> </u>		<u>ANALYSIS DATE</u>	<u>ORDER #</u>
<b>Prep Batch #....: 5138337</b>							
Calcium	785	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ8R1AJ
					Analysis Time...: 19:20		
Magnesium	226	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ8R1AK
					Analysis Time...: 19:20		
Potassium	7.0	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ8R1AL
					Analysis Time...: 19:20		
Sodium	265	50.0	mg/L	Dilution Factor: 10	SW846 6010B	05/18-05/20/05	HAJ8R1AM
					Analysis Time...: 10:59		

ConocoPhillips Co.

Client Sample ID: MW-11

## General Chemistry

Lot-Sample #...: ISE140132-007    Work Order #...: HAJ8R    Matrix.....: WATER  
 Date Sampled...: 05/12/05 08:48    Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	191	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	2760	500	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 500		Analysis Time...: 08:39		
Sulfate	209	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 12:18		
Total Alkalinity	191	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:34		
Total Dissolved Solids	5930	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:36		

ConocoPhillips Co.

Client Sample ID: MW-12

## GC/MS Volatiles

Lot-Sample #....: I5E140132-008 Work Order #....: HAJ8V1AD Matrix.....: WATER  
 Date Sampled...: 05/13/05 09:48 Date Received..: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137 Analysis Time...: 17:42  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	REPORTING		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	117	(67 - 130)
Toluene-d8	97	(83 - 115)
4-Bromofluorobenzene	99	(79 - 119)
Dibromofluoromethane	100	(88 - 119)

## ConocoPhillips Co.

Client Sample ID: MW-12

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-008 Work Order #....: HAJ8V1AN Matrix.....: WATER  
 Date Sampled....: 05/13/05 09:48 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 19:16  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo(a)anthracene	ND	9.6	ug/L
Benzo(a)pyrene	ND	9.6	ug/L
Benzo(b)fluoranthene	ND	9.6	ug/L
Benzo(ghi)perylene	ND	9.6	ug/L
Benzo(k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz(a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	87	(28 - 120)
2-Fluorobiphenyl	83	(23 - 119)
Terphenyl-d14	88	(10 - 123)
2-Fluorophenol	70	(22 - 121)
Phenol-d5	76	(34 - 117)
2,4,6-Tribromophenol	89	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-12

## TOTAL Metals

Lot-Sample #...: I5E140132-008

Date Sampled...: 05/13/05 09:48 Date Received...: 05/14/05 08:45

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #...: 5138337						
Calcium	5140	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ8V1AJ
		Dilution Factor: 10		Analysis Time..: 11:05		
Magnesium	1480	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ8V1AK
		Dilution Factor: 10		Analysis Time..: 11:05		
Potassium	142	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ8V1AL
		Dilution Factor: 10		Analysis Time..: 11:05		
Sodium	30100	1000	mg/L	SW846 6010B	05/18-05/20/05	HAJ8V1AM
		Dilution Factor: 200		Analysis Time..: 14:51		

ConocoPhillips Co.

Client Sample ID: MW-12

General Chemistry

Lot-Sample #...: I5E140132-008    Work Order #...: HAJ8V    Matrix.....: WATER  
 Date Sampled...: 05/13/05 09:48    Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bicarbonate Alkalinity	75.4	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	64200	10000	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 10000		Analysis Time...: 12:31		
Sulfate	1590	500	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 500		Analysis Time...: 08:52		
Total Alkalinity	75.4	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:37		
Total Dissolved Solids	118000	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:18		

ConocoPhillips Co.

Client Sample ID: MW-13

## GC/MS Volatiles

Lot-Sample #....: I5E140132-009    Work Order #....: HAJ8X1AD    Matrix.....: WATER  
 Date Sampled....: 05/11/05 13:52    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137    Analysis Time...: 18:05  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	92	(67 - 130)	
Toluene-d8	97	(83 - 115)	
4-Bromofluorobenzene	92	(79 - 119)	
Dibromofluoromethane	92	(88 - 119)	

ConocoPhillips Co.

Client Sample ID: MW-13

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-009 Work Order #....: HAJ8X1AN Matrix.....: WATER  
 Date Sampled....: 05/11/05 13:52 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 19:47  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	REPORTING		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a) anthracene	ND	9.6	ug/L
Benzo (a) pyrene	ND	9.6	ug/L
Benzo (b) fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k) fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a, h) anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno (1, 2, 3-cd) pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	71	(28 - 120)
2-Fluorobiphenyl	72	(23 - 119)
Terphenyl-d14	85	(10 - 123)
2-Fluorophenol	73	(22 - 121)
Phenol-d5	71	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-13

## TOTAL Metals

Lot-Sample #....: I5E140132-009

Matrix.....: WATER

Date Sampled...: 05/11/05 13:52 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>		<u>ORDER #</u>	
<b>Prep Batch #....: 5138337</b>							
Calcium	183	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8X1AJ	
		Dilution Factor:	1	Analysis Time...:	19:32		
Magnesium	43.5	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8X1AK	
		Dilution Factor:	1	Analysis Time...:	19:32		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8X1AL	
		Dilution Factor:	1	Analysis Time...:	19:32		
Sodium	55.8	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ8X1AM	
		Dilution Factor:	1	Analysis Time...:	19:32		

ConocoPhillips Co.

Client Sample ID: MW-13

## General Chemistry

Lot-Sample #...: I5E140132-009    Work Order #...: HAJ8X    Matrix.....: WATER  
 Date Sampled...: 05/11/05 13:52    Date Received..: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-	PREP
					ANALYSIS DATE	BATCH #
Bicarbonate Alkalinity	204	5.0	mg/L	MCAWW 310.1	05/16/05	5136233
		Dilution Factor: 1		Analysis Time...: 09:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/16/05	5136234
		Dilution Factor: 1		Analysis Time...: 09:00		
Chloride	204	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 09:05		
Sulfate	217	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 09:05		
Total Alkalinity	204	5.0	mg/L	MCAWW 310.1	05/16/05	5136230
		Dilution Factor: 1		Analysis Time...: 09:00		
Total Dissolved Solids	1140	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:04		

## ConocoPhillips Co.

Client Sample ID: MW-14

## GC/MS Volatiles

Lot-Sample #....: I5E140132-010 Work Order #....: HAJ811AD Matrix.....: WATER  
 Date Sampled....: 05/12/05 10:08 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137 Analysis Time...: 18:27  
 Dilution Factor: 1 Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	91	(67 - 130)
Toluene-d8	96	(83 - 115)
4-Bromofluorobenzene	92	(79 - 119)
Dibromofluoromethane	91	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-14

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-010 Work Order #....: HAJ811AN Matrix.....: WATER  
 Date Sampled....: 05/12/05 10:08 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 20:18  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a) anthracene	ND	9.6	ug/L
Benzo (a) pyrene	ND	9.6	ug/L
Benzo (b) fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k) fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a, h) anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	81	(28 - 120)
2-Fluorobiphenyl	82	(23 - 119)
Terphenyl-d14	81	(10 - 123)
2-Fluorophenol	76	(22 - 121)
Phenol-d5	76	(34 - 117)
2,4,6-Tribromophenol	86	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-14

## TOTAL Metals

Lot-Sample #....: ISE140132-010

Matrix.....: WATER

Date Sampled...: 05/12/05 10:08 Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>		<u>ORDER #</u>	
<b>Prep Batch #....: 5138337</b>							
Calcium	536	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ811AJ	
		Dilution Factor:	1	Analysis Time...:	19:37		
Magnesium	170	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ811AK	
		Dilution Factor:	1	Analysis Time...:	19:37		
Potassium	6.1	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ811AL	
		Dilution Factor:	1	Analysis Time...:	19:37		
Sodium	62.6	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ811AM	
		Dilution Factor:	1	Analysis Time...:	19:37		

ConocoPhillips Co.

Client Sample ID: MW-14

## General Chemistry

Lot-Sample #....: I5E140132-010    Work Order #....: HAJ81    Matrix.....: WATER  
 Date Sampled...: 05/12/05 10:08    Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bicarbonate Alkalinity	180	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	1080	200	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 200		Analysis Time...: 12:44		
Sulfate	427	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 09:18		
Total Alkalinity	180	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:39		
Total Dissolved Solids	4260	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:38		

ConocoPhillips Co.

Client Sample ID: MW-15

## GC/MS Volatiles

Lot-Sample #....: ISE140132-011 Work Order #....: HAJ821AD Matrix.....: WATER  
 Date Sampled...: 05/11/05 16:00 Date Received..: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5137137 Analysis Time...: 18:50  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>
Benzene	2.5	LIMIT ug/L
Ethylbenzene	ND	1.0 ug/L
Toluene	ND	1.0 ug/L
Xylenes (total)	ND	3.0 ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	92	(67 - 130)
Toluene-d8	97	(83 - 115)
4-Bromofluorobenzene	96	(79 - 119)
Dibromofluoromethane	93	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-15

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-011 Work Order #....: HAJ821AN Matrix.....: WATER  
 Date Sampled...: 05/11/05 16:00 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 20:49  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a)anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b)fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a, h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	81	(28 - 120)
2-Fluorobiphenyl	79	(23 - 119)
Terphenyl-d14	79	(10 - 123)
2-Fluorophenol	79	(22 - 121)
Phenol-d5	79	(34 - 117)
2, 4, 6-Tribromophenol	85	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-15

## TOTAL Metals

Lot-Sample #....: I5E140132-011

Matrix.....: WATER

Date Sampled...: 05/11/05 16:00 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>WORK ORDER #</u>
		<u>LIMIT</u>	<u>UNITS</u>				
<b>Prep Batch #....: 5138337</b>							
Calcium	114	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ821AJ
					Analysis Time...: 19:43		
Magnesium	50.9	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ821AK
					Analysis Time...: 19:43		
Potassium	ND	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ821AL
					Analysis Time...: 19:43		
Sodium	49.8	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ821AM
					Analysis Time...: 19:43		

ConocoPhillips Co.

Client Sample ID: MW-15

**General Chemistry**

**Lot-Sample #....:** I5E140132-011    **Work Order #....:** HAJ82    **Matrix.....:** WATER  
**Date Sampled....:** 05/11/05 16:00    **Date Received..:** 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	206	5.0	mg/L	MCAWW 310.1	05/16/05	5136233
		Dilution Factor: 1		Analysis Time...: 09:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/16/05	5136234
		Dilution Factor: 1		Analysis Time...: 09:00		
Chloride	218	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 09:30		
Sulfate	42.0	10.0	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 10		Analysis Time...: 13:23		
Total Alkalinity	258	5.0	mg/L	MCAWW 310.1	05/16/05	5136230
		Dilution Factor: 1		Analysis Time...: 09:00		
Total Dissolved Solids	808	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:06		

ConocoPhillips Co.

Client Sample ID: MW-16

## GC/MS Volatiles

Lot-Sample #....: I5E140132-012 Work Order #....: HAJ841AD Matrix.....: WATER  
 Date Sampled....: 05/11/05 18:10 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/18/05 Analysis Date...: 05/18/05  
 Prep Batch #....: 5140152 Analysis Time...: 18:33  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	91	(67 - 130)
Toluene-d8	96	(83 - 115)
4-Bromofluorobenzene	94	(79 - 119)
Dibromofluoromethane	93	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-16

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-012    Work Order #....: HAJ841AN    Matrix.....: WATER  
 Date Sampled....: 05/11/05 18:10    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085    Analysis Time...: 21:20  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a)anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b)fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno (1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	87	(28 - 120)
2-Fluorobiphenyl	84	(23 - 119)
Terphenyl-d14	83	(10 - 123)
2-Fluorophenol	86	(22 - 121)
Phenol-d5	82	(34 - 117)
2,4,6-Tribromophenol	88	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-16

## TOTAL Metals

Lot-Sample #....: I5E140132-012

Matrix.....: WATER

Date Sampled...: 05/11/05 18:10 Date Received..: 05/14/05 08:45

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>Prep Batch #....: 5138337</b>							
Calcium	192	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ841AJ
					Analysis Time...: 19:49		
Magnesium	55.5	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ841AK
					Analysis Time...: 19:49		
Potassium	ND	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ841AL
					Analysis Time...: 19:49		
Sodium	75.2	5.0	mg/L	Dilution Factor: 1	SW846 6010B	05/18-05/19/05	HAJ841AM
					Analysis Time...: 19:49		

ConocoPhillips Co.

Client Sample ID: MW-16

## General Chemistry

Lot-Sample #....: I5E140132-012 Work Order #....: HAJ84 Matrix.....: WATER  
 Date Sampled...: 05/11/05 18:10 Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	258	5.0	mg/L	MCAWW 310.1	05/16/05	5136233
		Dilution Factor: 1		Analysis Time...: 09:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/16/05	5136234
		Dilution Factor: 1		Analysis Time...: 09:00		
Chloride	293	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 09:43		
Sulfate	157	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 09:43		
Total Alkalinity	223	5.0	mg/L	MCAWW 310.1	05/16/05	5136230
		Dilution Factor: 1		Analysis Time...: 09:00		
Total Dissolved Solids	1220	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:08		

ConocoPhillips Co.

Client Sample ID: MW-17

## GC/MS Volatiles

Lot-Sample #: ISE140132-013 Work Order #: HAJ851AD Matrix.....: WATER  
 Date Sampled...: 05/12/05 17:42 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/18/05 Analysis Date...: 05/18/05  
 Prep Batch #: 5140152 Analysis Time...: 18:55  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	94	(67 - 130)
Toluene-d8	96	(83 - 115)
4-Bromofluorobenzene	96	(79 - 119)
Dibromofluoromethane	93	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-17

GC/MS Semivolatiles

Lot-Sample #....: I5E140132-013 Work Order #....: HAJ851AN Matrix.....: WATER  
 Date Sampled....: 05/12/05 17:42 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 21:51  
 Dilution Factor: 1

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	10	ug/L
Acenaphthylene	ND	10	ug/L
Anthracene	ND	10	ug/L
Benzo (a) anthracene	ND	10	ug/L
Benzo (a) pyrene	ND	10	ug/L
Benzo (b) fluoranthene	ND	10	ug/L
Benzo (ghi)perylene	ND	10	ug/L
Benzo (k) fluoranthene	ND	10	ug/L
Chrysene	ND	10	ug/L
Dibenz (a, h) anthracene	ND	10	ug/L
Fluoranthene	ND	10	ug/L
Fluorene	ND	10	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	10	ug/L
Naphthalene	ND	10	ug/L
Phenanthrene	ND	10	ug/L
Pyrene	ND	10	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	82	(28 - 120)
2-Fluorobiphenyl	79	(23 - 119)
Terphenyl-d14	77	(10 - 123)
2-Fluorophenol	74	(22 - 121)
Phenol-d5	75	(34 - 117)
2,4,6-Tribromophenol	82	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-17

## TOTAL Metals

Lot-Sample #...: ISE140132-013

Date Sampled...: 05/12/05 17:42 Date Received...: 05/14/05 08:45

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #...: 5138337</b>						
Calcium	417	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ851AJ
		Dilution Factor:	1	Analysis Time..:	19:54	
Magnesium	91.1	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ851AK
		Dilution Factor:	1	Analysis Time..:	19:54	
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ851AL
		Dilution Factor:	1	Analysis Time..:	19:54	
Sodium	251	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ851AM
		Dilution Factor:	10	Analysis Time..:	11:10	

ConocoPhillips Co.

Client Sample ID: MW-17

## General Chemistry

Lot-Sample #....: I5E140132-013    Work Order #....: HAJ85    Matrix.....: WATER  
 Date Sampled...: 05/12/05 17:42    Date Received..: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	127	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	1020	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 10:48		
Sulfate	278	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 10:48		
Total Alkalinity	127	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:45		
Total Dissolved Solids	3700	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:40		

ConocoPhillips Co.

Client Sample ID: MW-18

## GC/MS Volatiles

Lot-Sample #....: I5E140132-014    Work Order #....: HAJ871AD    Matrix.....: WATER  
 Date Sampled....: 05/12/05 14:27    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/18/05    Analysis Date...: 05/18/05  
 Prep Batch #....: 5140152    Analysis Time...: 19:18  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
1,2-Dichloroethane-d4	95	(67 - 130)
Toluene-d8	97	(83 - 115)
4-Bromofluorobenzene	96	(79 - 119)
Dibromofluoromethane	93	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-18

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-014 Work Order #....: HAJ871AN Matrix.....: WATER  
 Date Sampled....: 05/12/05 14:27 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 22:22  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo(a)anthracene	ND	9.6	ug/L
Benzo(a)pyrene	ND	9.6	ug/L
Benzo(b)fluoranthene	ND	9.6	ug/L
Benzo(ghi)perylene	ND	9.6	ug/L
Benzo(k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz(a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	85	(28 - 120)
2-Fluorobiphenyl	82	(23 - 119)
Terphenyl-d14	79	(10 - 123)
2-Fluorophenol	83	(22 - 121)
Phenol-d5	81	(34 - 117)
2,4,6-Tribromophenol	85	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-18

**TOTAL Metals**

Lot-Sample #....: I5B140132-014                   Matrix.....: WATER  
 Date Sampled...: 05/12/05 14:27   Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....:	S138337					
Calcium	2370	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ871AJ
		Dilution Factor: 10		Analysis Time...: 11:16		
Magnesium	755	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ871AK
		Dilution Factor: 1		Analysis Time...: 20:00		
Potassium	37.8	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ871AL
		Dilution Factor: 1		Analysis Time...: 20:00		
Sodium	3410	500	mg/L	SW846 6010B	05/18-05/20/05	HAJ871AM
		Dilution Factor: 100		Analysis Time...: 14:32		

ConocoPhillips Co.

Client Sample ID: MW-18

## General Chemistry

Lot-Sample #...: I5E140132-014    Work Order #...: HAJ87    Matrix.....: WATER  
 Date Sampled...: 05/12/05 14:27    Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	113	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	10700	5000	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 5000		Analysis Time...: 13:36		
Sulfate	756	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 11:01		
Total Alkalinity	113	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:50		
Total Dissolved Solids	21800	40.0	mg/L	MCAWW 160.1	05/17/05	5139495
		Dilution Factor: 1		Analysis Time...: 14:42		

ConocoPhillips Co.

Client Sample ID: MW-19

## GC/MS Volatiles

Lot-Sample #....: I5E140132-015 Work Order #....: HAJ881AD Matrix.....: WATER  
 Date Sampled....: 05/12/05 11:45 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5138090 Analysis Time...: 20:33  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND	1.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	85	(67 - 130)
Toluene-d8	107	(83 - 115)
4-Bromofluorobenzene	89	(79 - 119)
Dibromofluoromethane	98	(88 - 119)

ConocoPhillips Co.

Client Sample ID: MW-19

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-015 Work Order #....: HAJ881AN Matrix.....: WATER  
 Date Sampled....: 05/12/05 11:45 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 22:53  
 Dilution Factor: 0.96 Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo(a)anthracene	ND	9.6	ug/L
Benzo(a)pyrene	ND	9.6	ug/L
Benzo(b)fluoranthene	ND	9.6	ug/L
Benzo(ghi)perylene	ND	9.6	ug/L
Benzo(k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz(a, h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	86	(28 - 120)
2-Fluorobiphenyl	83	(23 - 119)
Terphenyl-d14	80	(10 - 123)
2-Fluorophenol	80	(22 - 121)
Phenol-d5	78	(34 - 117)
2,4,6-Tribromophenol	87	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-19

## TOTAL Metals

Lot-Sample #....: I5E140132-015

Matrix.....: WATER

Date Sampled...: 05/12/05 11:45 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION-</u>	<u>WORK</u>
		<u>LIMIT</u>	<u>UNITS</u>	<u>ANALYSIS DATE</u>		<u>ORDER #</u>	
<b>Prep Batch #....: 5138337</b>							
Calcium	215	5.0	mg/L	SW846 6010B	Analysis Time...: 20:06	05/18-05/19/05	HAJ881AJ
		Dilution Factor: 1					
Magnesium	44.4	5.0	mg/L	SW846 6010B	Analysis Time...: 20:06	05/18-05/19/05	HAJ881AK
		Dilution Factor: 1					
Potassium	8.2	5.0	mg/L	SW846 6010B	Analysis Time...: 20:06	05/18-05/19/05	HAJ881AL
		Dilution Factor: 1					
Sodium	48.0	5.0	mg/L	SW846 6010B	Analysis Time...: 20:06	05/18-05/19/05	HAJ881AM
		Dilution Factor: 1					

ConocoPhillips Co.

Client Sample ID: MW-19

## General Chemistry

Lot-Sample #....: I5E140132-015 Work Order #....: HAJ88 Matrix.....: WATER  
 Date Sampled....: 05/12/05 11:45 Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	286	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	145	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 11:14		
Sulfate	25.8	10.0	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 10		Analysis Time...: 13:49		
Total Alkalinity	286	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 20:56		
Total Dissolved Solids	704	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:04		

ConocoPhillips Co.

Client Sample ID: MW-20

## GC/MS Volatiles

Lot-Sample #....: I5E140132-016 Work Order #....: HAJ891AD Matrix.....: WATER  
 Date Sampled....: 05/12/05 13:10 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/16/05  
 Prep Batch #....: 5138090 Analysis Time...: 20:53  
 Dilution Factor: 1

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	<u>LIMIT</u>	<u>UNITS</u>
Benzene	ND		1.0	ug/L
Ethylbenzene	ND		1.0	ug/L
Toluene	ND		1.0	ug/L
Xylenes (total)	ND		3.0	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	85		(67 - 130)
Toluene-d8	97		(83 - 115)
4-Bromofluorobenzene	88		(79 - 119)
Dibromofluoromethane	96		(88 - 119)

## ConocoPhillips Co.

Client Sample ID: MW-20

## GC/MS Semivolatiles

Lot-Sample #....: I5E140132-016    Work Order #....: HAJ891AN    Matrix.....: WATER  
 Date Sampled....: 05/12/05 13:10    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085    Analysis Time...: 23:23  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a) anthracene	ND	9.6	ug/L
Benzo (a) pyrene	ND	9.6	ug/L
Benzo (b) fluoranthene	ND	9.6	ug/L
Benzo (ghi) perylene	ND	9.6	ug/L
Benzo (k) fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a, h) anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	82	(28 - 120)
2-Fluorobiphenyl	80	(23 - 119)
Terphenyl-d14	77	(10 - 123)
2-Fluorophenol	83	(22 - 121)
Phenol-d5	81	(34 - 117)
2,4,6-Tribromophenol	84	(33 - 124)

ConocoPhillips Co.

Client Sample ID: MW-20

## TOTAL Metals

Lot-Sample #....: I5E140132-016

Matrix.....: WATER

Date Sampled....: 05/12/05 13:10 Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 5138337</b>						
Calcium	719	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ891AJ
		Dilution Factor: 1		Analysis Time...: 20:23		
Magnesium	270	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ891AK
		Dilution Factor: 1		Analysis Time...: 20:23		
Potassium	14.7	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ891AL
		Dilution Factor: 1		Analysis Time...: 20:23		
Sodium	499	50.0	mg/L	SW846 6010B	05/18-05/20/05	HAJ891AM
		Dilution Factor: 10		Analysis Time...: 11:22		

ConocoPhillips Co.

Client Sample ID: MW-20

## General Chemistry

Lot-Sample #....: ISE140132-016    Work Order #....: HAJ89    Matrix.....: WATER  
 Date Sampled...: 05/12/05 13:10    Date Received...: 05/14/05 08:45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Bicarbonate Alkalinity	90.4	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	2780	1000	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 1000		Analysis Time...: 14:02		
Sulfate	231	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time...: 11:27		
Total Alkalinity	90.4	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:02		
Total Dissolved Solids	6620	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:06		

ConocoPhillips Co.

Client Sample ID: DUPLICATE

## GC/MS Volatiles

Lot-Sample #....: I5E140132-017 Work Order #....: HAJ9A1AD Matrix.....: WATER  
 Date Sampled...: 05/13/05 14:15 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/19/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5140108 Analysis Time...: 01:03  
 Dilution Factor: 1000

Method.....: SW846 8260B

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>
Benzene	23000	1000 ug/L
Ethylbenzene	ND	1000 ug/L
Toluene	2000	1000 ug/L
Xylenes (total)	ND	3000 ug/L
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
1,2-Dichloroethane-d4	76	(67 - 130)
Toluene-d8	91	(83 - 115)
4-Bromofluorobenzene	104	(79 - 119)
Dibromofluoromethane	98	(88 - 119)

## ConocoPhillips Co.

Client Sample ID: DUPLICATE

## GC/MS Semivolatiles

Lot-Sample #....: ISE140132-017 Work Order #....: HAJ9A1AN Matrix.....: WATER  
 Date Sampled....: 05/13/05 14:15 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/20/05  
 Prep Batch #....: 5137085 Analysis Time...: 23:54  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>REPORTING</u>		
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a)anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b)fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1, 2, 3-cd)pyrene	ND	9.6	ug/L
Naphthalene	11	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
Nitrobenzene-d5	91	(28 - 120)
2-Fluorobiphenyl	89	(23 - 119)
Terphenyl-d14	87	(10 - 123)
2-Fluorophenol	80	(22 - 121)
Phenol-d5	100	(34 - 117)
2,4,6-Tribromophenol	102	(33 - 124)

ConocoPhillips Co.

Client Sample ID: DUPLICATE

## TOTAL Metals

Lot-Sample #....: I5E140132-017

Date Sampled....: 05/13/05 14:15 Date Received...: 05/14/05 08:45

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>Prep Batch #....: 5138337</b>						
Calcium	207	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ9A1AJ
		Dilution Factor: 1		Analysis Time...: 20:29		
Magnesium	49.6	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ9A1AK
		Dilution Factor: 1		Analysis Time...: 20:29		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ9A1AL
		Dilution Factor: 1		Analysis Time...: 20:29		
Sodium	41.6	5.0	mg/L	SW846 6010B	05/18-05/19/05	HAJ9A1AM
		Dilution Factor: 1		Analysis Time...: 20:29		

ConocoPhillips Co.

Client Sample ID: DUPLICATE

## General Chemistry

Lot-Sample #...: I5E140132-017    Work Order #...: HAJ9A    Matrix.....: WATER  
 Date Sampled...: 05/13/05 14:15    Date Received..: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bicarbonate Alkalinity	182	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time...: 19:00		
Carbonate Alkalinity	ND	5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time...: 19:00		
Chloride	408	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time...: 11:40		
Sulfate	ND	1.0	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 1		Analysis Time...: 14:15		
Total Alkalinity	182	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time...: 21:43		
Total Dissolved Solids	2650	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time...: 14:20		

ConocoPhillips Co.

Client Sample ID: WW

## GC/MS Volatiles

Lot-Sample #....: I5E140132-018    Work Order #....: HAJ9D1AD    Matrix.....: WATER  
 Date Sampled....: 05/13/05 08:12    Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05    Analysis Date...: 05/16/05  
 Prep Batch #....: 5138090    Analysis Time...: 21:14  
 Dilution Factor: 1

Method.....: SW846 8260B

PARAMETER	REPORTING		
	RESULT	LIMIT	UNITS
Benzene	ND	1.0	ug/L
Ethylbenzene	2.6	1.0	ug/L
Toluene	ND	1.0	ug/L
Xylenes (total)	ND	3.0	ug/L

SURROGATE	PERCENT		RECOVERY
	RECOVERY	LIMITS	
1,2-Dichloroethane-d4	95	(67 - 130)	
Toluene-d8	98	(83 - 115)	
4-Bromofluorobenzene	93	(79 - 119)	
Dibromofluoromethane	96	(88 - 119)	

ConocoPhillips Co.

Client Sample ID: WW

## GC/MS Semivolatiles

Lot-Sample #....: ISE140132-018 Work Order #....: HAJ9D1AN Matrix.....: WATER  
 Date Sampled...: 05/13/05 08:12 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/16/05 Analysis Date...: 05/21/05  
 Prep Batch #....: 5137085 Analysis Time...: 00:25  
 Dilution Factor: 0.96

Method.....: SW846 8270C

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
Acenaphthene	ND	9.6	ug/L
Acenaphthylene	ND	9.6	ug/L
Anthracene	ND	9.6	ug/L
Benzo (a)anthracene	ND	9.6	ug/L
Benzo (a)pyrene	ND	9.6	ug/L
Benzo (b)fluoranthene	ND	9.6	ug/L
Benzo (ghi)perylene	ND	9.6	ug/L
Benzo (k)fluoranthene	ND	9.6	ug/L
Chrysene	ND	9.6	ug/L
Dibenz (a,h)anthracene	ND	9.6	ug/L
Fluoranthene	ND	9.6	ug/L
Fluorene	ND	9.6	ug/L
Indeno(1,2,3-cd)pyrene	ND	9.6	ug/L
Naphthalene	ND	9.6	ug/L
Phenanthrene	ND	9.6	ug/L
Pyrene	ND	9.6	ug/L

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	86	(28 - 120)
2-Fluorobiphenyl	81	(23 - 119)
Terphenyl-d14	82	(10 - 123)
2-Fluorophenol	83	(22 - 121)
Phenol-d5	82	(34 - 117)
2,4,6-Tribromophenol	91	(33 - 124)

ConocoPhillips Co.

Client Sample ID: WW

**TOTAL Metals**

Lot-Sample #....: I5E140132-018

Date Sampled....: 05/13/05 08:12 Date Received...: 05/14/05 08:45

**Matrix.....: WATER**

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Prep Batch #....:	5138337					
Calcium	215	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ9D1AJ	
		Dilution Factor: 1		Analysis Time...: 20:34		
Magnesium	70.7	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ9D1AK	
		Dilution Factor: 1		Analysis Time...: 20:34		
Potassium	ND	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ9D1AL	
		Dilution Factor: 1		Analysis Time...: 20:34		
Sodium	147	5.0	mg/L	SW846 6010B	05/18-05/19/05 HAJ9D1AM	
		Dilution Factor: 1		Analysis Time...: 20:34		

ConocoPhillips Co.

Client Sample ID: WW

## General Chemistry

Lot-Sample #....: I5E140132-018 Work Order #....: HAJ9D Matrix.....: WATER  
 Date Sampled...: 05/13/05 08:12 Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Bicarbonate Alkalinity	201	5.0	mg/L	MCAWW 310.1	05/20/05	5144246
		Dilution Factor: 1		Analysis Time..: 19:00		
Carbonate Alkalinity ND		5.0	mg/L	MCAWW 310.1	05/20/05	5144245
		Dilution Factor: 1		Analysis Time..: 19:00		
Chloride	519	100	mg/L	MCAWW 300.0A	05/19/05	5139350
		Dilution Factor: 100		Analysis Time..: 11:53		
Sulfate	158	100	mg/L	MCAWW 300.0A	05/19/05	5139352
		Dilution Factor: 100		Analysis Time..: 11:53		
Total Alkalinity	201	5.0	mg/L	MCAWW 310.1	05/20/05	5140560
		Dilution Factor: 1		Analysis Time..: 21:49		
Total Dissolved Solids	1970	40.0	mg/L	MCAWW 160.1	05/17/05	5139499
		Dilution Factor: 1		Analysis Time..: 14:22		

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: I5E140132      Work Order #...: HAMTM1AA      Matrix.....: WATER  
 MB Lot-Sample #: I5E170000-137  
 Analysis Date...: 05/16/05      Prep Date.....: 05/16/05      Analysis Time..: 10:57  
 Dilution Factor: 1      Prep Batch #: 5137137

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	89	(67 - 130)	
Toluene-d8	97	(83 - 115)	
4-Bromofluorobenzene	92	(79 - 119)	
Dibromofluoromethane	92	(88 - 119)	

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #....: I5E140132      Work Order #....: HAP7L1AA      Matrix.....: WATER  
 MB Lot-Sample #: I5E180000-090  
 Analysis Date..: 05/16/05      Prep Date.....: 05/16/05      Analysis Time.: 14:25  
 Dilution Factor: 1      Prep Batch #: 5138090

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	89	(67 - 130)	
Toluene-d8	99	(83 - 115)	
4-Bromofluorobenzene	88	(79 - 119)	
Dibromofluoromethane	101	(88 - 119)	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**METHOD BLANK REPORT****GC/MS Volatiles**

**Client Lot #....:** ISE140132      **Work Order #....:** HAXWQ1AA      **Matrix.....:** WATER  
**MB Lot-Sample #:** ISE200000-108  
**Analysis Date...:** 05/19/05      **Prep Date.....:** 05/19/05      **Analysis Time..:** 21:39  
**Dilution Factor:** 1      **Prep Batch #....:** 5140108

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>		
		<b>LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<b>SURROGATE</b>	<b>PERCENT RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
1,2-Dichloroethane-d4	90	(67	- 130)
Toluene-d8	97	(83	- 115)
4-Bromofluorobenzene	91	(79	- 119)
Dibromofluoromethane	92	(88	- 119)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## GC/MS Volatiles

Client Lot #...: I5E140132  
 MB Lot-Sample #: I5E200000-152

Work Order #...: HAX1C1AA  
 Prep Date.....: 05/18/05

Matrix.....: WATER  
 Analysis Time.: 12:31

Analysis Date...: 05/18/05  
 Dilution Factor: 1

<u>PARAMETER</u>	REPORTING			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
1,2-Dichloroethane-d4	90	(67 - 130)	
Toluene-d8	97	(83 - 115)	
4-Bromofluorobenzene	91	(79 - 119)	
Dibromofluoromethane	92	(88 - 119)	

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**METHOD BLANK REPORT****GC/MS Volatiles**

**Client Lot #....:** I5E140132  
**MB Lot-Sample #:** I5E230000-343

**Work Order #....:** HA4GV1AA

**Matrix.....:** WATER

**Analysis Date...:** 05/20/05  
**Dilution Factor:** 1

**Prep Date.....:** 05/20/05  
**Prep Batch #....:** 5143343

**Analysis Time..:** 16:09

<b>PARAMETER</b>	<b>REPORTING</b>			
	<b>RESULT</b>	<b>LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>
Benzene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	3.0	ug/L	SW846 8260B

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
1,2-Dichloroethane-d4	93	(67	- 130)
Toluene-d8	97	(83	- 115)
4-Bromofluorobenzene	93	(79	- 119)
Dibromofluoromethane	94	(88	- 119)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## GC/MS Semivolatiles

Client Lot #....: I5E140132  
 MB Lot-Sample #: I5E170000-085

Work Order #....: HAMN51AA

Matrix.....: WATER

Analysis Date...: 05/20/05  
 Dilution Factor: 1

Prep Date.....: 05/16/05  
 Prep Batch #: 5137085

Analysis Time..: 14:05

<u>PARAMETER</u>	<u>REPORTING</u>			
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
Acenaphthene	ND	10	ug/L	SW846 8270C
Acenaphthylene	ND	10	ug/L	SW846 8270C
Anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)anthracene	ND	10	ug/L	SW846 8270C
Benzo(a)pyrene	ND	10	ug/L	SW846 8270C
Benzo(b)fluoranthene	ND	10	ug/L	SW846 8270C
Benzo(ghi)perylene	ND	10	ug/L	SW846 8270C
Benzo(k)fluoranthene	ND	10	ug/L	SW846 8270C
Chrysene	ND	10	ug/L	SW846 8270C
Dibenz(a,h)anthracene	ND	10	ug/L	SW846 8270C
Fluoranthene	ND	10	ug/L	SW846 8270C
Fluorene	ND	10	ug/L	SW846 8270C
Indeno(1,2,3-cd)pyrene	ND	10	ug/L	SW846 8270C
Naphthalene	ND	10	ug/L	SW846 8270C
Phenanthrene	ND	10	ug/L	SW846 8270C
Pyrene	ND	10	ug/L	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY</u>
		<u>LIMITS</u>
Nitrobenzene-d5	79	(28 - 120)
2-Fluorobiphenyl	78	(23 - 119)
Terphenyl-d14	82	(10 - 123)
2-Fluorophenol	74	(22 - 121)
Phenol-d5	66	(34 - 117)
2,4,6-Tribromophenol	79	(33 - 124)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## TOTAL Metals

Client Lot #...: I5E140132

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
<b>MB Lot-Sample #: I5E180000-337 Prep Batch #...: 5138337</b>							
Calcium	ND	5.0	mg/L	SW846 6010B		05/18-05/19/05	HAQ7M1AA
		Dilution Factor: 1					
		Analysis Time...: 18:06					
Magnesium	ND	5.0	mg/L	SW846 6010B		05/18-05/19/05	HAQ7M1AC
		Dilution Factor: 1					
		Analysis Time...: 18:06					
Potassium	ND	5.0	mg/L	SW846 6010B		05/18-05/19/05	HAQ7M1AD
		Dilution Factor: 1					
		Analysis Time...: 18:06					
Sodium	ND	5.0	mg/L	SW846 6010B		05/18-05/19/05	HAQ7M1AE
		Dilution Factor: 1					
		Analysis Time...: 18:06					

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## METHOD BLANK REPORT

## General Chemistry

Client Lot #....: I5E140132

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP
		LIMIT	UNITS	ANALYSIS DATE			
Chloride	ND	Work Order #: HARF31AA 1.0	mg/L	MB Lot-Sample #: I5E180000-384 MCAWW 300.0A	Dilution Factor: 1	05/18/05	5138384
					Analysis Time...: 08:11		
Chloride	ND	Work Order #: HAWFF1AA 1.0	mg/L	MB Lot-Sample #: I5E190000-350 MCAWW 300.0A	Dilution Factor: 1	05/19/05	5139350
					Analysis Time...: 08:13		
Sulfate	ND	Work Order #: HARFV1AA 1.0	mg/L	MB Lot-Sample #: I5E180000-382 MCAWW 300.0A	Dilution Factor: 1	05/18/05	5138382
					Analysis Time...: 08:11		
Sulfate	ND	Work Order #: HAWEE1AA 1.0	mg/L	MB Lot-Sample #: I5E190000-352 MCAWW 300.0A	Dilution Factor: 1	05/19/05	5139352
					Analysis Time...: 08:13		
Total Alkalinity	ND	Work Order #: HALDG1AA 5.0	mg/L	MB Lot-Sample #: I5E160000-230 MCAWW 310.1	Dilution Factor: 1	05/16/05	5136230
					Analysis Time...: 09:00		
Total Alkalinity	ND	Work Order #: HA2MT1AA 5.0	mg/L	MB Lot-Sample #: I5E200000-560 MCAWW 310.1	Dilution Factor: 1	05/20/05	5140560
					Analysis Time...: 19:06		
Total Dissolved Solids	ND	Work Order #: HAW8W1AA 40.0	mg/L	MB Lot-Sample #: I5E190000-495 MCAWW 160.1	Dilution Factor: 1	05/17/05	5139495
					Analysis Time...: 14:00		
Total Dissolved Solids	ND	Work Order #: HAW881AA 40.0	mg/L	MB Lot-Sample #: I5E190000-499 MCAWW 160.1	Dilution Factor: 1	05/17/05	5139499
					Analysis Time...: 14:00		

## NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## **LABORATORY CONTROL SAMPLE EVALUATION REPORT**

## GC/MS Volatiles

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>		<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
Benzene	94	(70 - 118)			SW846 8260B
	94	(70 - 118)	0.22	(0-20)	SW846 8260B
Ethylbenzene	93	(72 - 121)			SW846 8260B
	92	(72 - 121)	0.54	(0-20)	SW846 8260B
Toluene	93	(76 - 120)			SW846 8260B
	93	(76 - 120)	0.50	(0-20)	SW846 8260B
Xylenes (total)	96	(72 - 121)			SW846 8260B
	95	(72 - 121)	0.86	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	92	(75 - 115)
	93	(75 - 115)
Toluene-d8	98	(90 - 114)
	97	(90 - 114)
4-Bromofluorobenzene	89	(86 - 117)
	90	(86 - 117)
Dibromofluoromethane	96	(81 - 110)
	95	(81 - 110)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## **LABORATORY CONTROL SAMPLE EVALUATION REPORT**

## GC/MS Volatiles

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	
Benzene	97	(70 - 118)		SW846 8260B
	98	(70 - 118)	1.1	(0-20) SW846 8260B
Ethylbenzene	93	(72 - 121)		SW846 8260B
	94	(72 - 121)	1.1	(0-20) SW846 8260B
Toluene	101	(76 - 120)		SW846 8260B
	103	(76 - 120)	1.8	(0-20) SW846 8260B
Xylenes (total)	92	(72 - 121)		SW846 8260B
	93	(72 - 121)	0.70	(0-20) SW846 8260B

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	97	(75 - 115)
	96	(75 - 115)
Toluene-d8	100	(90 - 114)
	100	(90 - 114)
4-Bromofluorobenzene	95	(86 - 117)
	93	(86 - 117)
Dibromofluoromethane	103	(81 - 110)
	102	(81 - 110)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: ISE140132      Work Order #...: HAXWQ1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: ISE200000-108      HAXWQ1AD-LCSD  
 Prep Date.....: 05/19/05      Analysis Date...: 05/19/05  
 Prep Batch #...: 5140108      Analysis Time...: 19:00  
 Dilution Factor: 1

<u>PARAMETER</u>	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	RECOVERY	LIMITS	RPD	LIMITS	
Benzene	92	(70 - 118)			SW846 8260B
	91	(70 - 118)	2.1	(0-20)	SW846 8260B
Ethylbenzene	91	(72 - 121)			SW846 8260B
	88	(72 - 121)	2.8	(0-20)	SW846 8260B
Toluene	93	(76 - 120)			SW846 8260B
	90	(76 - 120)	3.5	(0-20)	SW846 8260B
Xylenes (total)	94	(72 - 121)			SW846 8260B
	91	(72 - 121)	3.8	(0-20)	SW846 8260B

<u>SURROGATE</u>	PERCENT	RECOVERY
	RECOVERY	LIMITS
1,2-Dichloroethane-d4	91	(75 - 115)
	91	(75 - 115)
Toluene-d8	97	(90 - 114)
	98	(90 - 114)
4-Bromofluorobenzene	90	(86 - 117)
	90	(86 - 117)
Dibromofluoromethane	93	(81 - 110)
	94	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**LABORATORY CONTROL SAMPLE EVALUATION REPORT**

### GC/MS Volatiles

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>		<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	
Benzene	93	(70 - 118)			SW846 8260B
	94	(70 - 118)	0.31	(0-20)	SW846 8260B
Ethylbenzene	92	(72 - 121)			SW846 8260B
	93	(72 - 121)	1.4	(0-20)	SW846 8260B
Toluene	95	(76 - 120)			SW846 8260B
	95	(76 - 120)	0.070	(0-20)	SW846 8260B
Xylenes (total)	96	(72 - 121)			SW846 8260B
	96	(72 - 121)	0.030	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	93	(75 - 115)
	89	(75 - 115)
Toluene-d8	98	(90 - 114)
	97	(90 - 114)
4-Bromofluorobenzene	88	(86 - 117)
	89	(86 - 117)
Dibromofluoromethane	92	(81 - 110)
	92	(81 - 110)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #: I5E140132      Work Order #: HA4GV1AC-LCS      Matrix.....: WATER  
 LCS Lot-Sample#: I5E230000-343                                    HA4GV1AD-LCSD  
 Prep Date.....: 05/20/05      Analysis Date.: 05/20/05  
 Prep Batch #: 5143343      Analysis Time.: 12:45  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Benzene	88	(70 - 118)			SW846 8260B
	86	(70 - 118)	2.0	(0-20)	SW846 8260B
Ethylbenzene	90	(72 - 121)			SW846 8260B
	87	(72 - 121)	3.0	(0-20)	SW846 8260B
Toluene	90	(76 - 120)			SW846 8260B
	87	(76 - 120)	2.8	(0-20)	SW846 8260B
Xylenes (total)	95	(72 - 121)			SW846 8260B
	90	(72 - 121)	5.4	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	89	(75 - 115)
	88	(75 - 115)
Toluene-d8	97	(90 - 114)
	97	(90 - 114)
4-Bromofluorobenzene	91	(86 - 117)
	90	(86 - 117)
Dibromofluoromethane	94	(81 - 110)
	96	(81 - 110)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #...: I5E140132      Work Order #...: HAMN51AC      Matrix.....: WATER  
 LCS Lot-Sample#: I5E170000-085  
 Prep Date.....: 05/16/05      Analysis Date...: 05/20/05  
 Prep Batch #...: 5137085      Analysis Time...: 14:36  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
Acenaphthene	88	(60 - 102)	SW846 8270C
Acenaphthylene	86	(59 - 100)	SW846 8270C
Anthracene	87	(60 - 102)	SW846 8270C
Benzo(a)anthracene	90	(58 - 102)	SW846 8270C
Benzo(a)pyrene	89	(57 - 103)	SW846 8270C
Benzo(b)fluoranthene	90	(55 - 99)	SW846 8270C
Benzo(ghi)perylene	85	(52 - 112)	SW846 8270C
Benzo(k)fluoranthene	96	(56 - 112)	SW846 8270C
Chrysene	91	(59 - 105)	SW846 8270C
Dibenz(a,h)anthracene	87	(56 - 110)	SW846 8270C
Fluoranthene	91	(58 - 106)	SW846 8270C
Fluorene	90	(61 - 104)	SW846 8270C
Indeno(1,2,3-cd)pyrene	88	(57 - 110)	SW846 8270C
Naphthalene	87	(58 - 101)	SW846 8270C
Phenanthrene	91	(59 - 108)	SW846 8270C
Pyrene	89	(62 - 104)	SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	94	(28 - 120)
2-Fluorobiphenyl	91	(23 - 119)
Terphenyl-d14	91	(10 - 123)
2-Fluorophenol	94	(22 - 121)
Phenol-d5	92	(34 - 117)
2,4,6-Tribromophenol	96	(33 - 124)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #....: I5E140132

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#:	I5E180000-337	Prep Batch #...: 5138337			
Calcium	101	(80 - 120)	SW846 6010B	05/18-05/19/05 HAQ7M1AF	
		Dilution Factor: 1		Analysis Time...: 18:12	
Magnesium	107	(80 - 120)	SW846 6010B	05/18-05/19/05 HAQ7M1AG	
		Dilution Factor: 1		Analysis Time...: 18:12	
Potassium	96	(80 - 120)	SW846 6010B	05/18-05/19/05 HAQ7M1AH	
		Dilution Factor: 1		Analysis Time...: 18:12	
Sodium	96	(80 - 120)	SW846 6010B	05/18-05/19/05 HAQ7M1AJ	
		Dilution Factor: 1		Analysis Time...: 18:12	

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## General Chemistry

Lot-Sample #....: I5E140132

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Alkalinity		WO#: HALDG1AC-LCS/HALDG1AD-LCSD	LCS	Lot-Sample#:	I5E160000-230		
	97	(80 - 120)		MCAWW 310.1		05/16/05	5136230
	98	(80 - 120) 0.55 (0-20)	0.55 (0-20)	MCAWW 310.1		05/16/05	5136230
		Dilution Factor: 1			Analysis Time...: 09:00		
Total Alkalinity		WO#: HA2MT1AC-LCS/HA2MT1AD-LCSD	LCS	Lot-Sample#:	I5E200000-560		
	96	(80 - 120)		MCAWW 310.1		05/20/05	5140560
	96	(80 - 120) 0.16 (0-20)	0.16 (0-20)	MCAWW 310.1		05/20/05	5140560
		Dilution Factor: 1			Analysis Time...: 18:40		

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## General Chemistry

Client Lot #....: I5E140132

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Chloride	96	Work Order #: HARF31AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	Sample#: 15E180000-384 05/18/05	Analysis Time...: 08:23 5138384
		Dilution Factor: 1			
Chloride	95	Work Order #: HAWFF1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	Sample#: 15E190000-350 05/19/05	Analysis Time...: 08:26 5139350
		Dilution Factor: 1			
Sulfate	98	Work Order #: HARFV1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	Sample#: 15E180000-382 05/18/05	Analysis Time...: 08:23 5138382
		Dilution Factor: 1			
Sulfate	95	Work Order #: HAWEE1AC (90 - 110)	LCS Lot-Sample#: MCAWW 300.0A	Sample#: 15E190000-352 05/19/05	Analysis Time...: 08:36 5139352
		Dilution Factor: 1			
Total Dissolved Solids	98	Work Order #: HAW8W1AC (87 - 113)	LCS Lot-Sample#: MCAWW 160.1	Sample#: 15E190000-495 05/17/05	Analysis Time...: 14:02 5139495
		Dilution Factor: 1			
Total Dissolved Solids	105	Work Order #: HAW881AC (87 - 113)	LCS Lot-Sample#: MCAWW 160.1	Sample#: 15E190000-499 05/17/05	Analysis Time...: 14:02 5139499
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5E140132      Work Order #....: HAG561AC-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E130212-004      HAG561AD-MSD  
 Date Sampled...: 05/11/05 11:30      Date Received..: 05/13/05 08:00  
 Prep Date.....: 05/16/05      Analysis Date..: 05/16/05  
 Prep Batch #....: 5137137      Analysis Time..: 09:05  
 Dilution Factor: 50

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
Benzene	95	(70 - 118)			SW846 8260B
	95	(70 - 118)	0.41	(0-20)	SW846 8260B
Ethylbenzene	93	(72 - 121)			SW846 8260B
	92	(72 - 121)	0.22	(0-20)	SW846 8260B
Toluene	93	(76 - 120)			SW846 8260B
	93	(76 - 120)	0.27	(0-20)	SW846 8260B
Xylenes (total)	98	(72 - 121)			SW846 8260B
	98	(72 - 121)	0.02	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	97	(67 - 130)
	93	(67 - 130)
Toluene-d8	97	(83 - 115)
	97	(83 - 115)
4-Bromofluorobenzene	92	(79 - 119)
	91	(79 - 119)
Dibromofluoromethane	97	(88 - 119)
	97	(88 - 119)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE EVALUATION REPORT****GC/MS Volatiles**

Client Lot #...: I5E140132      Work Order #...: HAGPM1AC-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E130184-003      HAGPM1AD-MSD  
 Date Sampled...: 05/10/05 14:45 Date Received..: 05/13/05 08:00  
 Prep Date.....: 05/16/05      Analysis Date..: 05/16/05  
 Prep Batch #...: 5138090      Analysis Time...: 13:03  
 Dilution Factor: 100

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	<u>RPD</u>		
Benzene	95	(70 - 118)			SW846 8260B
	97	(70 - 118)	0.67	(0-20)	SW846 8260B
Ethylbenzene	95	(72 - 121)			SW846 8260B
	93	(72 - 121)	0.98	(0-20)	SW846 8260B
Toluene	97	(76 - 120)			SW846 8260B
	94	(76 - 120)	0.61	(0-20)	SW846 8260B
Xylenes (total)	93	(72 - 121)			SW846 8260B
	94	(72 - 121)	0.21	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	95		(67 - 130)
	96		(67 - 130)
Toluene-d8	99		(83 - 115)
	101		(83 - 115)
4-Bromofluorobenzene	96		(79 - 119)
	98		(79 - 119)
Dibromofluoromethane	101		(88 - 119)
	101		(88 - 119)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5E140132      Work Order #....: HAJ791A2-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E140132-001      HAJ791A3-MSD  
 Date Sampled....: 05/13/05 12:45 Date Received...: 05/14/05 08:45  
 Prep Date.....: 05/19/05      Analysis Date...: 05/19/05  
 Prep Batch #....: 5140108      Analysis Time...: 20:08  
 Dilution Factor: 2000

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>RPD</u>	<u>LIMITS</u>	<u>METHOD</u>
	<u>RECOVERY</u>	<u>LIMITS</u>			
Benzene	94	(70 - 118)			SW846 8260B
	99	(70 - 118)	2.2	(0-20)	SW846 8260B
Ethylbenzene	91	(72 - 121)			SW846 8260B
	91	(72 - 121)	0.11	(0-20)	SW846 8260B
Toluene	91	(76 - 120)			SW846 8260B
	94	(76 - 120)	1.9	(0-20)	SW846 8260B
Xylenes (total)	93	(72 - 121)			SW846 8260B
	96	(72 - 121)	2.3	(0-20)	SW846 8260B

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
	<u>RECOVERY</u>	<u>LIMITS</u>	
1,2-Dichloroethane-d4	90		(67 - 130)
	90		(67 - 130)
Toluene-d8	97		(83 - 115)
	97		(83 - 115)
4-Bromofluorobenzene	89		(79 - 119)
	90		(79 - 119)
Dibromofluoromethane	92		(88 - 119)
	94		(88 - 119)

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE EVALUATION REPORT****GC/MS Volatiles**

**Client Lot #...**: I5E140132      **Work Order #...**: HAAD61AC-MS      **Matrix.....**: WATER  
**MS Lot-Sample #:** I5E110221-001                                    HAAD61AD-MSD  
**Date Sampled...**: 05/10/05 10:00    **Date Received..**: 05/11/05 07:45  
**Prep Date.....**: 05/18/05      **Analysis Date...**: 05/18/05  
**Prep Batch #...**: 5140152      **Analysis Time..**: 09:02  
**Dilution Factor:** 200

<b>PARAMETER</b>	<b>PERCENT</b>	<b>RECOVERY</b>	<b>RPD</b>	<b>RPD</b>	<b>METHOD</b>
	<b>RECOVERY</b>	<b>LIMITS</b>			
Benzene	93	(70 - 118)			SW846 8260B
	95	(70 - 118)	1.8	(0-20)	SW846 8260B
Ethylbenzene	92	(72 - 121)			SW846 8260B
	93	(72 - 121)	0.84	(0-20)	SW846 8260B
Toluene	93	(76 - 120)			SW846 8260B
	91	(76 - 120)	1.3	(0-20)	SW846 8260B
Xylenes (total)	97	(72 - 121)			SW846 8260B
	97	(72 - 121)	0.20	(0-20)	SW846 8260B

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	<b>LIMITS</b>
	<b>RECOVERY</b>	<b>LIMITS</b>	
1,2-Dichloroethane-d4	88		(67 - 130)
	93		(67 - 130)
Toluene-d8	97		(83 - 115)
	98		(83 - 115)
4-Bromofluorobenzene	88		(79 - 119)
	88		(79 - 119)
Dibromofluoromethane	92		(88 - 119)
	94		(88 - 119)

**NOTE (S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5E140132      Work Order #....: HARON1AC-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E180321-002      HARON1AD-MSD  
 Date Sampled...: 05/18/05 08:15 Date Received...: 05/18/05 10:50  
 Prep Date.....: 05/20/05      Analysis Date...: 05/20/05  
 Prep Batch #....: 5143343      Analysis Time...: 14:37  
 Dilution Factor: 10

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Benzene	85	(70 - 118)	2.5	(0-20)	SW846 8260B
	87	(70 - 118)			SW846 8260B
Ethylbenzene	83	(72 - 121)	1.7	(0-20)	SW846 8260B
	84	(72 - 121)			SW846 8260B
Toluene	87	(76 - 120)	0.23	(0-20)	SW846 8260B
	87	(76 - 120)			SW846 8260B
Xylenes (total)	85	(72 - 121)	2.0	(0-20)	SW846 8260B
	86	(72 - 121)			SW846 8260B

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
1,2-Dichloroethane-d4	93	(67 - 130)
	94	(67 - 130)
Toluene-d8	96	(83 - 115)
	97	(83 - 115)
4-Bromofluorobenzene	87	(79 - 119)
	91	(79 - 119)
Dibromofluoromethane	93	(88 - 119)
	96	(88 - 119)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #....: I5E140132      Work Order #....: HATTF1AT-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E190106-010      HATTF1AU-MSD  
 Date Sampled....: 05/15/05 09:03 Date Received...: 05/18/05 10:15  
 Prep Date.....: 05/20/05      Analysis Date...: 05/20/05  
 Prep Batch #....: 5143343      Analysis Time...: 23:01  
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY		RPD LIMITS	METHOD
		LIMITS	RPD		
Benzene	103	(70 - 118)	0.28	(0-20)	SW846 8260B
	104	(70 - 118)			SW846 8260B
Ethylbenzene	98	(72 - 121)	0.75	(0-20)	SW846 8260B
	97	(72 - 121)			SW846 8260B
Toluene	99	(76 - 120)	0.47	(0-20)	SW846 8260B
	99	(76 - 120)			SW846 8260B
Xylenes (total)	102	(72 - 121)	1.5	(0-20)	SW846 8260B
	100	(72 - 121)			SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	98	(67 - 130)
	98	(67 - 130)
Toluene-d8	98	(83 - 115)
	98	(83 - 115)
4-Bromofluorobenzene	90	(79 - 119)
	88	(79 - 119)
Dibromofluoromethane	97	(88 - 119)
	97	(88 - 119)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #...: I5E140132      Work Order #...: HAJ791AP-MS      Matrix.....: WATER  
 MS Lot-Sample #: I5E140132-001      HAJ791AQ-MSD  
 Date Sampled...: 05/13/05 12:45 Date Received..: 05/14/05 08:45  
 Prep Date.....: 05/16/05      Analysis Date..: 05/20/05  
 Prep Batch #...: 5137085      Analysis Time..: 15:38  
 Dilution Factor: 4.8

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>
Acenaphthene	93 DIL	(60 - 102)	1.6	(0-20)	SW846 8270C
	92 DIL	(60 - 102)			SW846 8270C
Acenaphthylene	87 DIL	(59 - 100)	1.0	(0-20)	SW846 8270C
	86 DIL	(59 - 100)			SW846 8270C
Anthracene	90 DIL	(60 - 102)	0.42	(0-20)	SW846 8270C
	90 DIL	(60 - 102)			SW846 8270C
Benzo(a)anthracene	85 DIL	(58 - 102)	0.77	(0-20)	SW846 8270C
	86 DIL	(58 - 102)			SW846 8270C
Benzo(a)pyrene	82 DIL	(57 - 103)	0.29	(0-20)	SW846 8270C
	82 DIL	(57 - 103)			SW846 8270C
Benzo(b)fluoranthene	87 DIL	(55 - 99)	5.9	(0-20)	SW846 8270C
	82 DIL	(55 - 99)			SW846 8270C
Benzo(ghi)perylene	82 DIL	(52 - 112)	1.4	(0-20)	SW846 8270C
	81 DIL	(52 - 112)			SW846 8270C
Benzo(k)fluoranthene	89 DIL	(56 - 112)	6.5	(0-20)	SW846 8270C
	95 DIL	(56 - 112)			SW846 8270C
Chrysene	87 DIL	(59 - 105)	0.17	(0-20)	SW846 8270C
	87 DIL	(59 - 105)			SW846 8270C
Dibenz(a,h)anthracene	81 DIL	(56 - 110)	0.20	(0-20)	SW846 8270C
	81 DIL	(56 - 110)			SW846 8270C
Fluoranthene	95 DIL	(58 - 106)	2.1	(0-20)	SW846 8270C
	93 DIL	(58 - 106)			SW846 8270C
Fluorene	94 DIL	(61 - 104)	0.87	(0-20)	SW846 8270C
	94 DIL	(61 - 104)			SW846 8270C
Indeno(1,2,3-cd)pyrene	83 DIL	(57 - 110)	0.51	(0-20)	SW846 8270C
	83 DIL	(57 - 110)			SW846 8270C
Naphthalene	91 DIL	(58 - 101)	0.31	(0-20)	SW846 8270C
	91 DIL	(58 - 101)			SW846 8270C
Phenanthrene	92 DIL	(59 - 108)	2.1	(0-20)	SW846 8270C
	94 DIL	(59 - 108)			SW846 8270C
Pyrene	90 DIL	(62 - 104)	0.22	(0-20)	SW846 8270C
	90 DIL	(62 - 104)			SW846 8270C

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Nitrobenzene-d5	94 DIL	(28 - 120)
2-Fluorobiphenyl	92 DIL	(28 - 120)
	100 DIL	(23 - 119)
	96 DIL	(23 - 119)

(Continued on next page)

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## GC/MS Semivolatiles

Client Lot #....: I5E140132      Work Order #....: HAJ791AP-MS      Matrix.....: WATER  
MS Lot-Sample #: I5E140132-001    HAJ791AQ-MSD

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
Terphenyl-d14	90 DIL	(10 - 123)
	88 DIL	(10 - 123)
2-Fluorophenol	88 DIL	(22 - 121)
	85 DIL	(22 - 121)
Phenol-d5	106 DIL	(34 - 117)
	105 DIL	(34 - 117)
2,4,6-Tribromophenol	100 DIL	(33 - 124)
	95 DIL	(33 - 124)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## TOTAL Metals

Client Lot #...: I5E140132

Matrix.....: WATER

Date Sampled...: 05/13/05 12:45 Date Received...: 05/14/05 08:45

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
<b>MS Lot-Sample #: I5E140132-001 Prep Batch #...: 5138337</b>							
Calcium	NC	(75 - 125)			SW846 6010B	05/18-05/19/05 HAJ791AR	
	NC	(75 - 125)	(0-20)		SW846 6010B	05/18-05/19/05 HAJ791AT	
Dilution Factor: 1							
Analysis Time...: 18:35							
Magnesium	106	(75 - 125)			SW846 6010B	05/18-05/19/05 HAJ791AU	
	107	(75 - 125) 0.36	(0-20)		SW846 6010B	05/18-05/19/05 HAJ791AV	
Dilution Factor: 1							
Analysis Time...: 18:35							
Potassium	99	(75 - 125)			SW846 6010B	05/18-05/19/05 HAJ791AW	
	100	(75 - 125) 0.73	(0-20)		SW846 6010B	05/18-05/19/05 HAJ791AX	
Dilution Factor: 1							
Analysis Time...: 18:35							
Sodium	88	(75 - 125)			SW846 6010B	05/18-05/19/05 HAJ791A0	
	91	(75 - 125) 1.2	(0-20)		SW846 6010B	05/18-05/19/05 HAJ791A1	
Dilution Factor: 1							
Analysis Time...: 18:35							

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

## MATRIX SPIKE SAMPLE EVALUATION REPORT

## General Chemistry

Client Lot #....: I5E140132

Matrix.....: WATER

Date Sampled...: 05/12/05 10:10 Date Received..: 05/13/05 08:00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride			WO#:	HAGRA1A1-MS/HAGRA1A2-MSD	MS	Lot-Sample #:	I5E130188-001
	99	(90 - 110)			MCAWW 300.0A	05/18/05	5138384
	100	(90 - 110)	0.21 (0-20)		MCAWW 300.0A	05/18/05	5138384
				Dilution Factor: 20			
				Analysis Time...: 08:49			
Chloride			WO#:	HAJ841AR-MS/HAJ841AT-MSD	MS	Lot-Sample #:	I5E140132-012
	101	(90 - 110)			MCAWW 300.0A	05/19/05	5139350
	80 N	(90 - 110)	13 (0-20)		MCAWW 300.0A	05/19/05	5139350
				Dilution Factor: 100			
				Analysis Time...: 09:56			
Sulfate			WO#:	HAGRA1AX-MS/HAGRA1A0-MSD	MS	Lot-Sample #:	I5E130188-001
	97	(90 - 110)			MCAWW 300.0A	05/18/05	5138382
	97	(90 - 110)	0.04 (0-20)		MCAWW 300.0A	05/18/05	5138382
				Dilution Factor: 100			
				Analysis Time...: 11:50			
Sulfate			WO#:	HAJ841AP-MS/HAJ841AQ-MSD	MS	Lot-Sample #:	I5E140132-012
	94	(90 - 110)			MCAWW 300.0A	05/19/05	5139352
	81 N	(90 - 110)	11 (0-20)		MCAWW 300.0A	05/19/05	5139352
				Dilution Factor: 100			
				Analysis Time...: 09:56			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

## **SAMPLE DUPLICATE EVALUATION REPORT**

## General Chemistry

**Client Lot #....: I5E140132      Work Order #....: HADP8-SMP      Matrix.....: WATER**

Date Sampled...: 05/11/05 08:30 Date Received..: 05/12/05 07:55

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Alkalinity	327	324	mg/L	1.2	(0-20)	SD Lot-Sample #: ISE120173-001 MCAWW 310.1	05/16/05	5136230
						Dilution Factor: 1	Analysis Time...: 09:00	

**SAMPLE DUPLICATE EVALUATION REPORT**

## General Chemistry

**Client Lot #....: I5E140132      Work Order #....: HAJ8X-SMP      Matrix.....: WATER**

Date Sampled...: 05/11/05 13:52 Date Received..: 05/14/05 08:45

PARAM	RESULT	DUPLICATE		RPD		METHOD	PREPARATION-		PREP BATCH #
		RESULT	UNITS	RPD	LIMIT		ANALYSIS	DATE	
Total Alkalinity	204	206	mg/L	0.96	(0-20)	SD Lot-Sample #:	I5E140132-009		
						MCAWW	310.1	05/16/05	5136230
						Dilution Factor:	1	Analysis Time...:	09:00

## **SAMPLE DUPLICATE EVALUATION REPORT**

## General Chemistry

Date Sampled...: 05/12/05 14:27 Date Received...: 05/14/05 08:45

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Dissolved Solids						SD Lot-Sample #: I5E140132-014		
21800	22000	mg/L	1.0	(0-20)	MCAWW 160.1	05/17/05	5139495	
				Dilution Factor: 1	Analysis Time...: 14:42			

## SAMPLE DUPLICATE EVALUATION REPORT

## General Chemistry

Client Lot #....: I5E140132      Work Order #....: HAKDG-SMP      Matrix.....: WATER  
     HAKDG-DUP

Date Sampled....: 05/13/05 11:55    Date Received...: 05/14/05 08:45

PARAM	RESULT	DUPLICATE	UNITS	RPD	LIMIT	METHOD	PREPARATION-	PREP
		RESULT					ANALYSIS DATE	
Total Dissolved Solids						SD Lot-Sample #:	I5E140141-024	
718	726	mg/L	1.1	(0-20)	MCAWW 160.1	Analysis Time...:	05/17/05	5139499
		Dilution Factor: 1						

## **SAMPLE DUPLICATE EVALUATION REPORT**

General Chemistry

**Client Lot #....:** I5E140132      **Work Order #....:** HAHAE-SMP  
    HAHAE-DUP      **Matrix.....:** WATER

Date Sampled...: 05/12/05 13:45 Date Received..: 05/13/05 08:00

DUPLICATE		RPD		PREPARATION-		PREP	
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	ANALYSIS DATE	BATCH #
Total Alkalinity	258	257	mg/L	0.63	(0-20)	SD Lot-Sample #: ISE130223-002	
					MCAWW 310.1	05/20/05	5140560
				Dilution Factor: 1	Analysis Time...: 19:40		

**SAMPLE DUPLICATE EVALUATION REPORT****General Chemistry****Client Lot #...: I5E140132      Work Order #...: HAJ8E-SMP      Matrix.....: WATER**

HAJ8E-DUP

**Date Sampled...: 05/13/05 08:40      Date Received..: 05/14/05 08:45**

PARAM	RESULT	DUPLICATE		RPD	LIMIT	METHOD	PREPARATION-	PREP	BATCH #
		RESULT	UNITS						
Total Alkalinity	231	229	mg/L	0.74	(0-20)	MCAWW 310.1	SD Lot-Sample #: I5E140132-003	05/20/05	5140560
			Dilution Factor: 1				Analysis Time..: 21:18		

### Report Attachment

Note that if this report contains tests performed for the following methods, the associated method deviations are applicable.

EPA 410.4, COD: Laboratory uses different analytical wavelength as specified by instrument manufacturer.

EPA 340.2, Fluoride: Preliminary Bellack distillation not performed.

EPA 624: The laboratory uses a different desorb time and purge volume than stated in the method.

EPA 8151A: Laboratory utilizes alternate extraction solvent.

Iowa OA1: Benzene, toluene, ethylbenzene and xylenes (BTEX) are not analyzed along with the Gasoline Range Organics if client does not require BTEX.

EPA TO-12: Samples not analyzed in duplicate.

EPA TO-14A and TO-15: Zero humidified nitrogen is used in place of air for method blanks.

### TRRP Reporting Requirements

If this package contains reports requiring TRRP (Texas Risk Reduction Program) reporting criteria, the following information applies.

The REPORTING LIMIT is equivalent to the TRRP acronym MQL (method quantitation limit).

The MDL is equivalent to the TRRP acronym SQL (sample quantitation limit).

SEVERN  
TRENT

STL

Page 1 of 2

## CHAIN-OF-CUSTODY ADDENDUM

Lot No: JSE140132RECEIVED BY: Bj

COC NUMBER: \_\_\_\_\_

DATE/TIME RECEIVED: 5/14/05 0845QUOTE/PROFILE: 42065UNPACKED DATE/TIME: 5/14/05 1030CLIENT/PROJECT: Marm MidlandSAMPLES LOGGED IN: Bj LOG-IN REVIEWED: CCNumber of Shipping Containers Received  
with Chain of Custody 5VOC AIR / FILTER SAMPLES  YES SEE SECTIONS 1.0, 2.0, & 6.01.0 CONTAINERS EXAMINED UPON RECEIPT: Bj

Container Sealed:  YES  NO      Custody Seal Signed/Dated:  YES  NO  
 Custody Seal Present:  YES  NO      Containers checked for radioactivity:  YES  NO  N/A  
 If seal not intact or Geiger counter reading >0.5 mR/hr, list air bill number of that container(s): \_\_\_\_\_

## 2.0 VOC CANISTERS EXAMINED UPON RECEIPT: \_\_\_\_\_

Canister Valves Closed:  YES  NO Samples Received Match Chain:  YES  NO  
 Canister Valves Capped:  YES  NO Other Equipment Received:  YES  NO  
 Valve Cap Tightened Properly:  YES  NO See Additional Comments (Section 5.0 and / or 7.0)  YES  NO  
 Packing Material Used: (circle) Chain-of-Custody form properly maintained:  YES  NO  
 None / Absorbent / Paper / Bubble Wrap Can Size:  6L  15L Other \_\_\_\_\_

3.0 SAMPLE TEMPERATURE UPON RECEIPT BY: BjIR THERMOMETER #: P-5

Temperature of the container(s):

Circle selection: TB = Temp. Blank and/or SC = Sample Container [acceptable tolerance 4°C ± 2°; (NC, WI: 1-4.4°C)]  

TB	TB	TB	TB	TB	TB	TB	TB	TB	TB
SC 2°	SC 4°	SC 4°C	SC 4°	SC 4°C	SC	SC	SC	SC	SC

If temperature is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM). Date: \_\_\_\_\_ Time: \_\_\_\_\_

Samples received do not require cooling \_\_\_\_\_ OK to analyze samples:  YES  NOPRESERVATION OF SAMPLES REQUIRED:  NA  YES VERIFIED BY: Bj

Base samples are >pH 12:  YES  NO Acid preserved are <pH 2:  YES  NO  
 Cyanide samples checked for sulfides:  YES Sulfide samples appear to be preserved with zinc acetate:  YES  NO

Samples checked for chlorine per specification (N.C.)  YES Free chlorine present:  YES  NO  
 If sample preservation is outside acceptable tolerance, Project Manager was notified (\_\_\_\_ PM)

Date: \_\_\_\_\_ Time: \_\_\_\_\_  see pH adjustment form

## VOLATILE SAMPLES FILLED COMPLETELY, IF NOT, LIST ID AND HEADSPACE OF VOA's CONTAINING BUBBLES EXCEEDING 6MM IN DIAMETER:

Sample ID	mm Headspace

Sample ID	mm Headspace



I5E142

# Chain of Custody Record

CHAIN OF CUSTODY NUMBER  
S0012512-001

# SEVERN TRENT

Severn Trent Laboratories, Inc.

STL4149 (1202)

Client <b>Karen Technologies</b>	Project Manager <b>Greg Pope</b>	Date <b>05/01/2005</b>	Page <b>1</b> of <b>5</b>						
Address <b>1103 W Industrial Ave</b>	Telephone Number (Area Code)/Fax Number <b>[432] 686-8081 / [900]</b>	Lab Location <b>STL Austin</b>	Analysis						
City <b>Killeen</b>	State <b>TX</b>	Zip Code <b>76541</b>	Site Contact <b>Greg Pope</b>						
Project Number/Name <b>6519 Malinaar Gas Plant</b>	Carrier/Waybill Number								
Contract/Purchase Order/Quote Number <b>CONTRACT / PURCHASE ORDER # : 6519NKA002</b>									
Sample I.D. Number and Description	Date	Time	Sample Type	Containers	Volume	Type	No.	Preservative	Condition on Receipt/Comments
<b>HH-2</b>	<b>5/13/05</b>	<b>1245</b>	<b>WATER</b>	<b>1L</b>	<b>AMBER</b>	<b>3</b>	<b>None</b>	<b>4</b>	<b>5/14/05 BY See Cac Add</b>
<b>HH-2</b>			<b>WATER</b>	<b>40mL</b>	<b>VIAL</b>	<b>4</b>	<b>1:1 HCl</b>	<b>1</b>	
<b>HH-2</b>			<b>WATER</b>	<b>250mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>Cone HNO3</b>	<b>1</b>	
<b>HH-2</b>			<b>WATER</b>	<b>500mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>None</b>	<b>1</b>	
<b>HH-4</b>	<b>5/13/05</b>	<b>1105</b>	<b>WATER</b>	<b>1L</b>	<b>AMBER</b>	<b>2</b>	<b>None</b>	<b>1</b>	
<b>HH-4</b>			<b>WATER</b>	<b>40mL</b>	<b>VIAL</b>	<b>4</b>	<b>1:1 HCl</b>	<b>1</b>	
<b>HH-4</b>			<b>WATER</b>	<b>250mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>Cone HNO3</b>	<b>1</b>	
<b>HH-4</b>			<b>WATER</b>	<b>500mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>None</b>	<b>1</b>	
<b>HH-6</b>			<b>WATER</b>	<b>1L</b>	<b>AMBER</b>	<b>2</b>	<b>None</b>	<b>1</b>	
<b>HH-6</b>			<b>WATER</b>	<b>40mL</b>	<b>VIAL</b>	<b>4</b>	<b>1:1 HCl</b>	<b>1</b>	
<b>HH-6</b>			<b>WATER</b>	<b>250mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>Cone HNO3</b>	<b>1</b>	
<b>HH-6</b>			<b>WATER</b>	<b>500mL</b>	<b>PLASTIC</b>	<b>1</b>	<b>None</b>	<b>1</b>	
<b>STRIP BLANK_1</b>			<b>WATER</b>	<b>1500</b>	<b>VIAL</b>	<b>2</b>	<b>1:1 HCl</b>	<b>1</b>	
<b>Special Instructions</b> <b>8264 BTX; 8270 PAHS; 6010 Ca, Mg, Na, K</b>									

<input checked="" type="checkbox"/> Possible Hazard Identification	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Sample Disposal	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Disposal To Client	<input type="checkbox"/> Archive For	<input type="checkbox"/> Project Specific Requirements (Specify)	(A fee may be assessed if samples are retained longer than 3 months.)
<input type="checkbox"/> Turn Around Time Required	QC Level		<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.						
<input type="checkbox"/> Relinquished 1. Relinquished 2. Relinquished	Date <b>5/13/05</b>	Time <b>1600</b>	1. Received By <b>Jason Graham</b>		2. Received By <b>Bill Jank</b>	Date <b>5/14/05</b>	Time <b>0845</b>				
3. Relinquished By	Date	Time	3. Received By			Date	Time				
Comments											

DISTRIBUTION: WHITE - Stays with the sample; CANARY - Returned to Client with Report; PINK - Field Copy

**Chain of Custody  
Record**

STL4149 (1202)  
\$1012512-002  
CHAIN OF CUSTODY NUMBER

**SEVERN  
TRENT**

**STL**  
**Severn Trent Laboratories, Inc.**

46777

Client <b>Narin Technologies</b>	Project Manager <b>Greg Pope</b>	Date <b>05/09/2005</b>	Page <b>1</b> of <b>5</b>
Address <b>1103 E Industrial Ave</b>	Telephone Number (Area Code)/Fax Number <b>(432) 686-8881 / 1-800</b>	Lab Location <b>971 Austin</b>	Analysis
City <b>Midland</b>	State <b>TX</b>	Zip Code <b>79701</b>	Site Contact <b>Carrier/Vessel Number</b>
Project Number/Name <b>6519 Halibut Gas Plant</b>	Carrier/Vessel Number		

**CONTRACT / PURCHASE ORDER #: 6519XH002**

**Contract/Purchase Order/Quote Number**

Sample I.D. Number and Description	Date	Time	Sample Type	Volume	Containers	Type	No.	Preservative	Condition on Receipt/Comments
HH-8	5/13/05	14:5	WATER	1L	AMBER	VIAL	2	HCl	2" 5/14/05 BY See contact
HH-8			VATER	400L	PLASTIC	VIAL	4	1:1 HCl	
HH-8			VATER	2300L	PLASTIC	VIAL	1	Cone HNO3	
HH-9	5/12/05	15:3	WATER	1L	AMBER	PLASTIC	1	HCl	
HH-10			VATER	400L	PLASTIC	VIAL	4	1:1 HCl	
HH-10			VATER	2500L	PLASTIC	VIAL	4	Cone HNO3	
HH-10	5/13/05	09:0	WATER	500L	PLASTIC	VIAL	1	HCl	
HH-11			VATER	1L	AMBER	PLASTIC	1	HCl	
HH-11			VATER	400L	PLASTIC	VIAL	2	HCl	
HH-11			VATER	2500L	PLASTIC	VIAL	4	1:1 HCl	
HH-11			VATER	500L	PLASTIC	VIAL	1	HCl	
HH-12	5/13/05	09:3	WATER	1L	AMBER	PLASTIC	1	HCl	
HH-12			VATER	400L	PLASTIC	VIAL	4	1:1 HCl	
HH-12			VATER	2500L	PLASTIC	VIAL	4	Cone HNO3	
HH-12			VATER	500L	PLASTIC	VIAL	1	HCl	
Special Instructions <b>8260 BTEX; 8270 PAHS; 6010 Ca, Mg, Sr, K</b>									

Possible Hazard Identification  
 Non-Hazard     Flammable  
 Normal     Rush     Other  
 Turn Around Time Required  
 1 Day     2 Days     3 Days  
 Project Specific Requirements (Specify)

Sample Disposal  
 Poison A     Poison B     Unknown  
 Return To Client     Disposal By Lab     Archive For \_\_\_\_\_ Months

(A fee may be assessed if samples are retained longer than 3 months)

1. Received By <b>John Jason Gashen</b>	Date <b>5/13/05</b>	Time <b>16:00</b>	1. Received By <b>Bill Jenkins</b>	Date <b>5/14/05</b>	Time <b>08:45</b>
2. Relinquished By <b>John Jason Gashen</b>	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**Chain of Custody  
Record**

CHAIN OF CUSTODY NUMBER  
**\$0012512-003**

**SEVERN TRENT**

**Severn Trent Laboratories, Inc.**

46-8

123/125

Client <u>Maria Technologies</u>		Project Manager <u>Greg Pope</u>		Date <u>05/04/2005</u>		Page <u>3</u> of <u>4</u>		
Address 1103 N Industrial Ave		Telephone Number (Area Code)/Fax Number (432) 686-3081 / (800)		Lab Location STL Austin		Analysis		
City <u>Midland</u>	State <u>TX</u>	Zip Code <u>79301</u>	Site Contact <u>Greg Pope</u>					
Project Number/Name <u>6519 Mallard Gas Plant</u>		Carrier/Waybill Number						
Contract/Purchase Order/Quote Number								
CONTRACT / PURCHASE ORDER #: <u>6519MALL02</u>								
Sample I.D. Number and Description		Date	Time	Sample Type	Volume	Containers	Preservative	
<u>MM-13</u>		<u>5/11/05</u>	<u>1232</u>	<u>WATER</u>	<u>1L</u>	<u>AMBER</u>	<u>2</u>	
<u>MM-13</u>				<u>VIAL</u>	<u>40mL</u>	<u>VIAL</u>	<u>4</u>	
<u>MM-13</u>				<u>VIAL</u>	<u>250mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-13</u>				<u>VIAL</u>	<u>500mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-14</u>		<u>5/12/05</u>	<u>1008</u>	<u>WATER</u>	<u>1L</u>	<u>AMBER</u>	<u>2</u>	
<u>MM-14</u>				<u>VIAL</u>	<u>40mL</u>	<u>VIAL</u>	<u>4</u>	
<u>MM-14</u>				<u>VIAL</u>	<u>250mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-14</u>				<u>VIAL</u>	<u>500mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-15</u>		<u>5/11/05</u>	<u>1630</u>	<u>WATER</u>	<u>1L</u>	<u>AMBER</u>	<u>2</u>	
<u>MM-15</u>				<u>VIAL</u>	<u>40mL</u>	<u>VIAL</u>	<u>4</u>	
<u>MM-15</u>				<u>VIAL</u>	<u>250mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-15</u>				<u>VIAL</u>	<u>500mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-16</u>		<u>5/11/05</u>	<u>1910</u>	<u>WATER</u>	<u>1L</u>	<u>AMBER</u>	<u>2</u>	
<u>MM-16</u>				<u>VIAL</u>	<u>40mL</u>	<u>VIAL</u>	<u>4</u>	
<u>MM-16</u>				<u>VIAL</u>	<u>250mL</u>	<u>PLASTIC</u>	<u>1</u>	
<u>MM-16</u>				<u>VIAL</u>	<u>500mL</u>	<u>PLASTIC</u>	<u>1</u>	
Special Instructions		<u>8260 BTX; 8270 PAR; 6010 Ca, K, Na, I</u>						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown		Sample Disposal <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Project Specific Requirements (Specify)						
<input type="checkbox"/> Turn Around Time Required <input type="checkbox"/> Normal <input type="checkbox"/> Rush		QC Level <input type="checkbox"/> I. <input type="checkbox"/> II. <input type="checkbox"/> III.						
<input type="checkbox"/> Relinquished By _____ <u>J. S. - J. S. - J. S.</u>		Date <u>5/13/05</u>	Time <u>1600</u>	1. Received By <u>Bill Jenkins</u>		2. Received By _____		Date <u>5/14/05</u>
3. Relinquished By _____		Date <u></u>	Time <u></u>	3. Received By _____		Date <u></u>		Time <u></u>
Comments								

Possible Hazard Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  
 Turn Around Time Required  
 Normal  Rush  
 Relinquished By \_\_\_\_\_  
J. S. - J. S. - J. S.

Sample Disposal  
 Disposal By Lab  Archive For \_\_\_\_\_  
 Project Specific Requirements (Specify)

QC Level  
 I.  II.  III.  
 1. Received By \_\_\_\_\_  
 2. Received By \_\_\_\_\_

Date  
5/14/05

Time  
0445

Date

Time

DISTRIBUTION: WHITE - Stays with the Sample; CANARY - Returned to Client with Report; PINK - Field Copy

**STL**  
46779  
**Chain of Custody  
Record**

CHAIN OF CUSTOMY NUMBER  
\$1012512-104

**SEVERN  
TRENT**

**Severn Trent Laboratories, Inc.**

STL4149 (1202)

Client <b>Karin Technologies</b>	Project Manager <b>Greg Pope</b>	Date <b>05/04/2005</b>	Page <b>1</b>
Address <b>1703 N Industrial Ave Midland Project Number/Name 6519 Natural Gas Plant</b>	Telephone Number (Area Code)/Fax Number <b>(432) 686-8081 / (432)</b>	Lab Location <b>SPL Austin</b>	of <b>5</b>
City <b>Midland</b>	State <b>TX</b>	Zip Code <b>79701</b>	Analysis
Site Contact <b>Carrier/Voybill Number</b>	Site Contact <b>Carrier/Voybill Number</b>	Site Contact <b>Carrier/Voybill Number</b>	Site Contact <b>Carrier/Voybill Number</b>
<b>CONTRACT / PURCHASE ORDER # : 6519NAT002</b>			
Sample I.D. Number and Description	Date	Time	Sample Type
MM-17	5/2/05	1742	WATER
MM-17			WATER
MM-17			WATER
MM-17			WATER
MM-18	5/12/05	1427	WATER
MM-18			WATER
MM-19			WATER
MM-20	5/12/05	1310	WATER
MM-20			WATER
MM-20			WATER
MM-20			WATER
Special Instructions	<b>8260 BTU; 8270 BTU; 8010 Ca, Mg, Na, I</b>		
Possible Hazard Identification	Sample Disposal		
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B
<input type="checkbox"/> Normal	<input type="checkbox"/> Rush	<input type="checkbox"/> Other	QC Level <b>□ I. □ II. □ III.</b>
Turn Around Time Required			
1. Relinquished By <b>Jason Grammer</b>			
2. Received By <b>Bill Jard</b>			
3. Received By			
Comments			
(A fee may be assessed if samples are retained longer than 3 months)			
Project Specific Requirements (Specify)			
1. Received By	Date <b>5/13/05</b>	Time <b>1600</b>	Date <b>5/14/05</b>
2. Received By	Date	Time	Date
3. Received By	Date	Time	Date

**Chain of Custody  
Record**

CLIA# OF CUSTODY NUMBER  
**\$1012511-005**

**SEVERN TRENT**

**Severn Trent Laboratories, Inc.**

**46100**

STL4149 (1202)

Client <b>Mazin Technologies</b>	Project Manager <b>Greg Pope</b>	Date <b>05/01/2005</b>	Page <b>1</b> of _____
Address <b>1103 E Industrial Ave</b>	Telephone Number / Area Code/Fax Number <b>(432) 686-8001 / (000)</b>	Lab Location <b>STL Austin</b>	Analysis
City <b>Midland</b>	State <b>TX</b>	Site Contact <b>Greg Pope</b>	
Project Number/Name <b>6519 Mallard Gas Plant</b>	Carrier/Waybill Number		

**CONTRACT / PURCHASE ORDER # : 6519MALLARD**

Sample I.D. Number and Description	Date	Time	Sample Type	Volume	Type	No.	Preservative	Condition on Receipt/Comments
DUPLICATE	5/13/05	14:15	VIAL	1L	AMBER	2	None	4°C 5/14/05 by See CR add
DUPLICATE			VIAL	40ml	VIAL	4	1:1 HCl	
DUPLICATE			VIAL	250ml	PLASTIC	1	Conc HNO3	
DUPLICATE			VIAL	500ml	PLASTIC	1	None	
II	08/12	14:15	VIAL	1L	AMBER	2	None	
II			VIAL	40ml	VIAL	4	1:1 HCl	
II			VIAL	250ml	PLASTIC	1	Conc HNO3	
II			VIAL	500ml	PLASTIC	1	None	
TRIP BLANK 1	1/26/05	14:00	VIAL	40ml	VIAL	2	1:1 HCl	Not rec'd

**Special Instructions** **8264 8781; 8270 PAHS; 6010 Ca, Mg, Na, K**

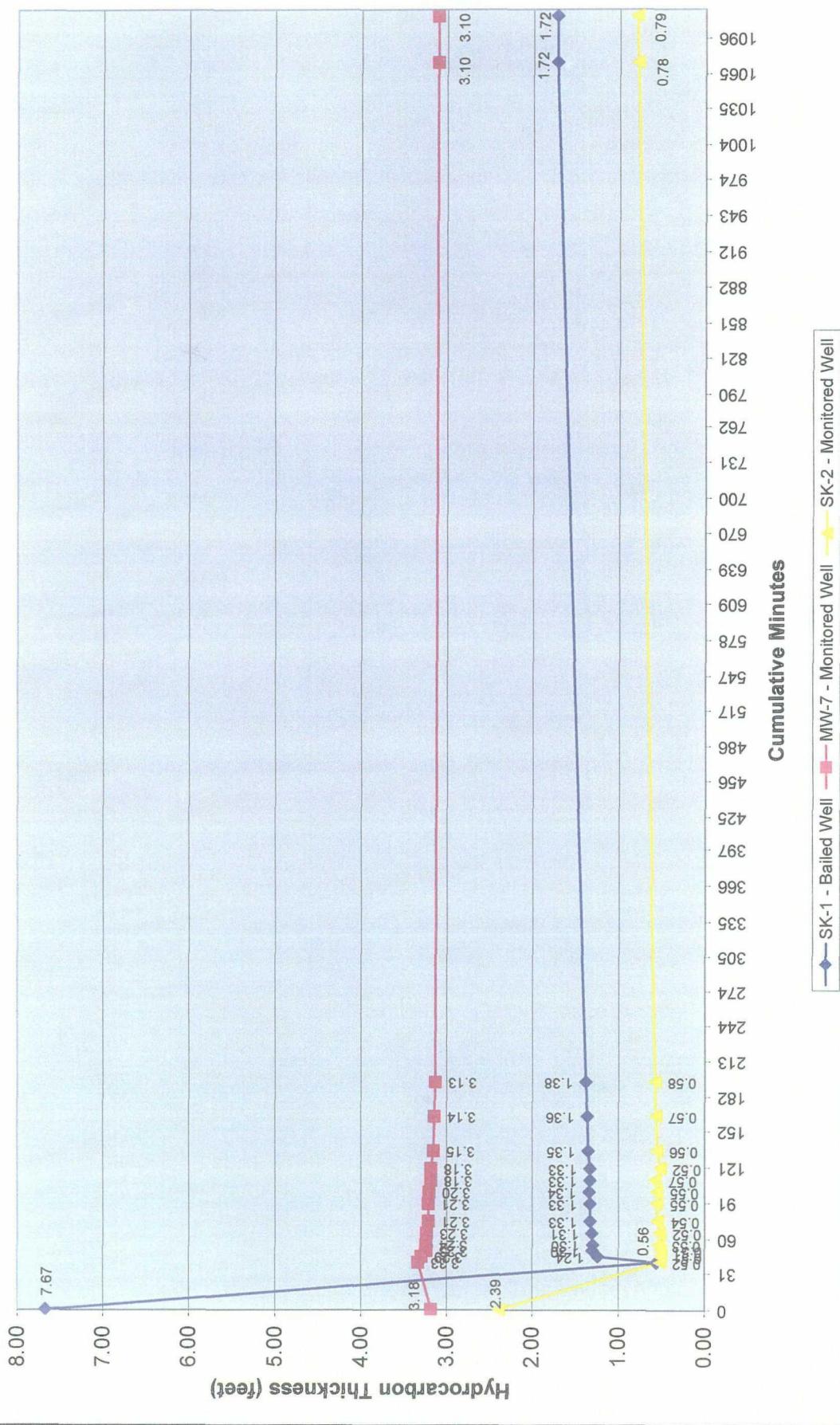
Possible Hazard Identification	Sample Disposal	
<input checked="" type="checkbox"/> Non-Hazard	<input type="checkbox"/> Disposal By Lab	
<input type="checkbox"/> Flammable	<input type="checkbox"/> Return To Client	
<input type="checkbox"/> Corrosive	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required	Project Specific Requirements (Specify)	
<input type="checkbox"/> Normal		
<input type="checkbox"/> Rush		
<input type="checkbox"/> Other _____		
QC Level		
<input type="checkbox"/> I.	<input type="checkbox"/> II.	<input type="checkbox"/> III.

DISTRIBUTION: **WHITE** - Stays with the Sample; **CANARY** - Returned to Client with Report: **PINK** - Field Copy

125/125

**APPENDIX B**  
**Pilot Test Data Graphs**

SK-1 Recovery  
May 19, 2005



**MW-7 Recovery**  
**May 20, 2005**

