

**3R - 326**

# **REPORTS**

**DATE:**

**2001**

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3R326



*Environmental Services*  
187 County Road 4980  
Bloomfield, New Mexico 87413  
(505) 632-4409 (office)  
(505) 632-4405 (fax)

March 20, 2002

Mr. William Olson  
Hydrologist  
Oil Conservation Division  
1220 S. St. Francis Dr.  
Santa Fe, NM 87505

RECEIVED

APR 04 2002

ENVIRONMENTAL BUREAU  
OIL CONSERVATION DIVISION

**RE: 2001 GROUND WATER SUMMARY REPORT**

Dear Mr. Olson:

Enclosed for your review is the 2001 Ground Water Summary Report. The report presents monitoring data for eighteen sites having petroleum hydrocarbon impacted ground water, which resulted from the past use of unlined surface impoundments. The sites included in the report are listed in Table 1.

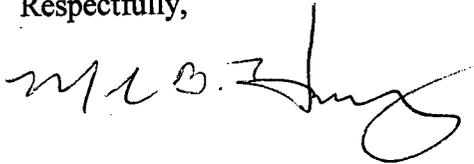
In 2001, three sites met the required remediation standards and were closed with OCD approval. The sites, listed in Table 2, achieved clean closure through a combination of contaminant source removal actions and monitored natural attenuation. Ground water cleanup objectives at each site were met in roughly three years, or less.

Of the eighteen active sites, five have accumulations of LNAPL in one or more monitoring well. In December 2001, the LNAPL accumulations were removed from these wells to evaluate LNAPL recovery rates and to augment the natural attenuation process. In 2002, passive LNAPL collection devices will be deployed or manual LNAPL removal events will be scheduled at some of the sites.

The remaining thirteen active sites either contain concentrations of dissolved BTEX in excess of cleanup standards or have met cleanup standards but have not yet demonstrated four consecutive clean quarters. Pursuant to discussions on the subject with OCD, Williams intends to implement various methods to accelerate the attenuation at select sites. These augmentation methods will be incorporated into an addendum to the Ground Water Management plan.

Thank you for your time to review this submittal. If you have any questions regarding the report, you may call me at (505) 632-4409 or Jim Struhs at (505) 632-4457.

Respectfully,



Mark B. Harvey  
Project Coordinator  
Mark.Harvey@Williams.com



James P. Struhs  
Project Hydrogeologist  
Jim.Struhs@Williams.com

Attachment  
Enclosure

c: Denny Foust, OCD Aztec District Office  
Bill Liess, BLM Farmington District Office

**Table 1. List of Active Sites for 2001 Report**

| Count | Site Name                | Unit Letter | Section | Township | Range | Longitude   | Latitude  | OCD Initial Notification |
|-------|--------------------------|-------------|---------|----------|-------|-------------|-----------|--------------------------|
| 1     | Blanco Wash Drip         | J           | 31      | 27N      | 8W    | -107.721574 | 36.530995 | 19-Feb-99                |
| 2     | Chamberlain 1            | F           | 14      | 32N      | 12W   | -108.068853 | 36.990549 | 30-Sep-99                |
| 3     | Davis 1                  | E           | 11      | 31N      | 12W   | -108.068919 | 36.916257 | 2-Mar-99                 |
| 4     | Dogie East Pit           | D           | 4       | 25N      | 6W    | -107.478874 | 36.434196 | 7-Jul-97                 |
| 5     | Dogie North Pit          | D           | 4       | 25N      | 6W    | -107.479158 | 36.435784 | 7-Jul-97                 |
| 6     | Florance 124             | C           | 27      | 29N      | 9W    | -107.76698  | 36.70209  | 12-Aug-96                |
| 7     | Florance 40              | G           | 21      | 30N      | 8W    | -107.67775  | 36.800088 | 27-Jan-97                |
| 8     | Florance M 47X           | G           | 5       | 30N      | 9W    | -107.799823 | 36.843166 | 27-Jan-97                |
| 9     | Grenier 4A               | M           | 7       | 31N      | 11W   | -108.036001 | 36.910167 | 18-Oct-99                |
| 10    | Honolulu Drip            | B           | 15      | 26N      | 4W    | -107.238469 | 36.492341 | 18-Jun-96                |
| 11    | Ice Canyon Drip          | J           | 13      | 26N      | 7W    | -107.52226  | 36.484972 | 1-Dec-97                 |
| 12    | Jicarilla Contract 147-6 | C           | 6       | 25N      | 5W    | -107.402363 | 36.433963 | 13-Aug-98                |
| 13    | Kaufman 1                | H           | 33      | 31N      | 13W   | -108.202128 | 36.860121 | 9-Mar-00                 |
| 14    | O' Shea 1M               | F           | 3       | 31N      | 13W   | -108.193596 | 36.932228 | 6-Jun-98                 |
| 15    | Patterson A Com A1       | G           | 2       | 31N      | 12W   | -108.061165 | 36.930755 | 2-Mar-99                 |
| 16    | Pritchard 2              | J           | 6       | 30N      | 8W    | -107.712068 | 36.837817 | 22-Feb-99                |
| 17    | Wilmerding 1M            | C           | 10      | 31N      | 13W   | -108.193158 | 36.91846  | 5-Jun-98                 |
| 18    | Zachry 18E               | O           | 11      | 28N      | 10W   | -107.860007 | 36.670885 | 6-Sep-96                 |

**Table 2. List of Sites Closed in 2001**

| Count | Site Name             | Unit Letter | Section | Township | Range | Longitude   | Latitude  | OCD Initial Notification | Status                    |
|-------|-----------------------|-------------|---------|----------|-------|-------------|-----------|--------------------------|---------------------------|
| 1     | Albright #4 Drip      | F           | 22      | 29N      | 10W   | -107.868451 | 36.715299 | 9-Jul-99                 | Approved; Wells Abandoned |
| 2     | Miles Federal 1E Drip | N           | 5       | 26N      | 7W    | -107.602489 | 36.510939 | 23-Jun-97                | Approved; Wells Abandoned |
| 3     | Randleman 1           | K           | 13      | 31N      | 11W   | -107.945067 | 36.896329 | 9-May-97                 | Pending OCD Approval      |

## Site Summary Report

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**Site Name: Kaufman 1**

**Reporting Period: 2001**

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**Location:** Unit H, Sec 23, Twn 31N, Rng 13W

**Canyon:** La Plata River

**Operator:** Snyder

**Vulnerable Class:** original

**OCD Ranking:** 40

**Lead Agency:** NMOCD / BLM

### Status Narrative

This site has eight monitoring wells, with seven quarters of ground water monitoring completed to date. Currently, all wells have BTEX levels below the method detection limit. A final round of sampling will be conducted in the first quarter of 2002.

# Analytical Data Summary

Site Name:

Kaufman 1

Reporting Period:

7/1/00 To 12/31/01

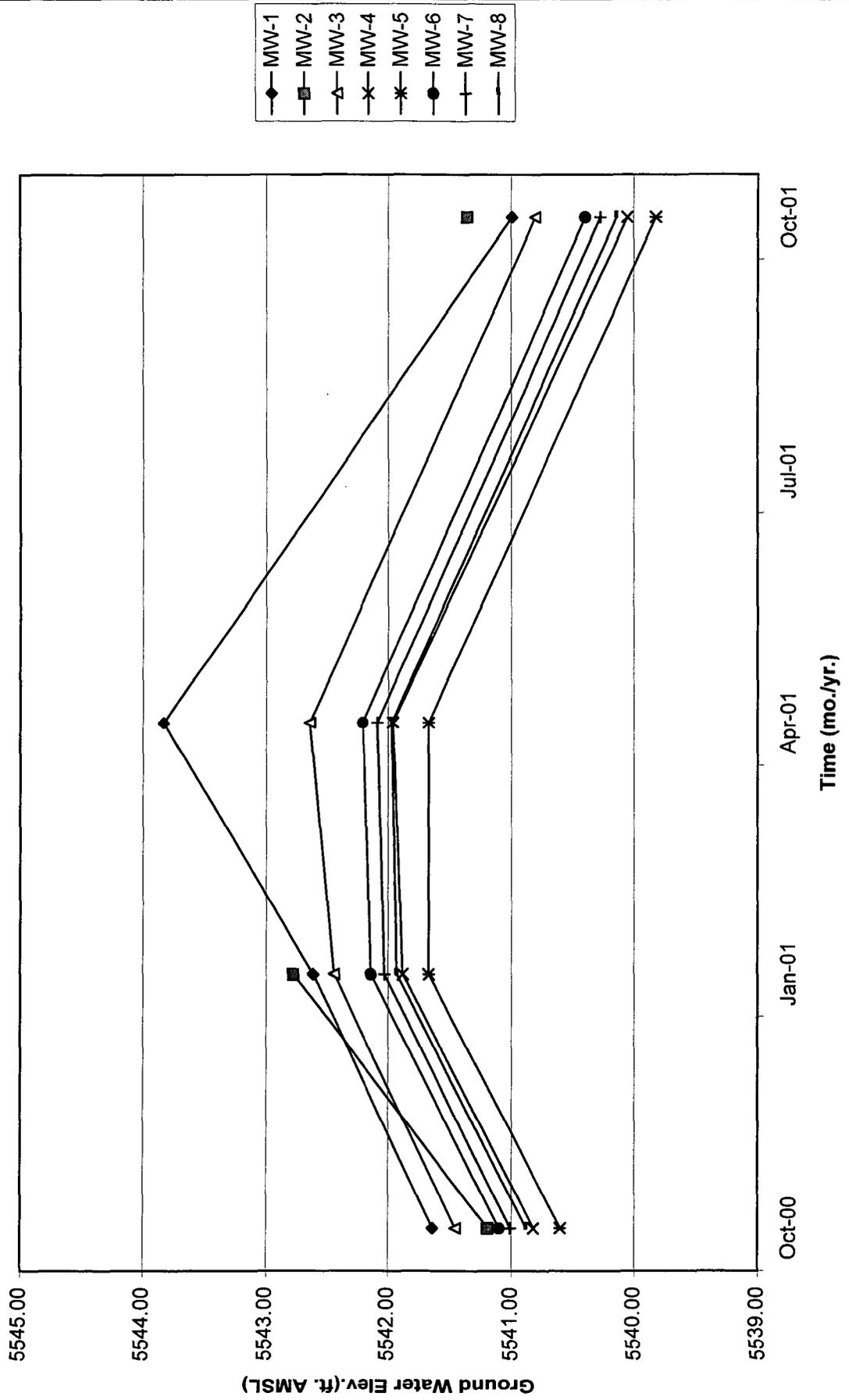
| Well ID     | Sample Date | Sample ID   | Benzene<br>ug/l | Toluene<br>ug/l | Ethylbenzene<br>ug/l | Xylene (Total)<br>ug/l |
|-------------|-------------|-------------|-----------------|-----------------|----------------------|------------------------|
| <b>MW-1</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 174812OCT00 | <1              | 1.44            | <1                   | 2.30                   |
|             | 1/12/01     | 122912JAN01 | <1              | <1              | <1                   | <1                     |
|             | 4/25/01     | 152025APR01 | <1              | <1              | <1                   | <1                     |
|             | 10/1/01     | 152301OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |
| <b>MW-2</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 180312OCT00 | <1              | <1              | <1                   | <1                     |
|             | 1/12/01     | 124112JAN01 | <1              | <1              | <1                   | <1                     |
| <b>MW-3</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 162612OCT00 | <1              | <1              | <1                   | <1                     |
|             | 1/12/01     | 125312JAN01 | <1              | <1              | <1                   | <1                     |
|             | 4/25/01     | 162125APR01 | <1              | <1              | <1                   | <1                     |
|             | 10/1/01     | 151501OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |
| <b>MW-4</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 153312OCT00 | <1              | <1              | <1                   | <1                     |
|             | 1/12/01     | 130412JAN01 | <1              | <1              | <1                   | 2.14                   |
|             | 4/25/01     | 161225APR01 | <1              | <1              | <1                   | <1                     |
|             | 10/1/01     | 151201OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |
| <b>MW-5</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 155512OCT00 | 1.01            | 1.25            | <1                   | 2.88                   |
|             | 1/12/01     | 131712JAN01 | <1              | <1              | <1                   | <1                     |
|             | 4/25/01     | 160325APR01 | <1              | <1              | <1                   | <1                     |
|             | 10/1/01     | 150901OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |
| <b>MW-6</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 172112OCT00 | <1              | <1              | <1                   | <1                     |
|             | 1/12/01     | 133112JAN01 | <1              | <1              | <1                   | <1                     |
|             | 4/25/01     | 153025APR01 | 1.78            | <1              | <1                   | <1                     |
|             | 10/1/01     | 152801OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |
| <b>MW-7</b> |             |             |                 |                 |                      |                        |
|             | 10/12/00    | 170612OCT00 | <1              | <1              | <1                   | <1                     |
|             | 1/12/01     | 134512JAN01 | <1              | <1              | <1                   | <1                     |
|             | 4/25/01     | 154225APR01 | <1              | <1              | <1                   | <1                     |
|             | 10/1/01     | 150101OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |

Site Name:  
Kaufman 1

Reporting Period:  
7/1/00 To 12/31/01

| Well ID | Sample Date | Sample ID   | Benzene<br>ug/l | Toluene<br>ug/l | Ethylbenzene<br>ug/l | Xylene (Total)<br>ug/l |
|---------|-------------|-------------|-----------------|-----------------|----------------------|------------------------|
| MW-8    | 10/12/00    | 164612OCT00 | 2.65            | <1              | 1.29                 | 2.95                   |
|         | 1/12/01     | 135912JAN01 | <1              | <1              | <1                   | <1                     |
|         | 4/25/01     | 155025APR01 | <1              | <1              | <1                   | <1                     |
|         | 10/1/01     | 150601OCT01 | <1.0            | <2.0            | <2.0                 | <2.0                   |

# Kaufman 1 Hydrograph



Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

Reference Fraction:0010518-03A  
 Sample ID: KAUF-1-UG-MW-1  
 Sample Date Collected: 10/12/00 17:48:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | 1.44   | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | 2.30   | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 75     | 125   | 75  |          |     |

ND=NONE DETECTED  
 =PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:

  
 TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

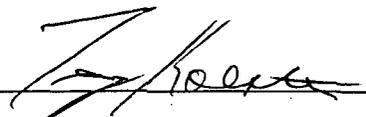
Reference Fraction:0010518-02A  
 Sample ID: KAUF-1-SA-MW-2  
 Sample Date Collected: 10/12/0018:03:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 77     | 125   | 75  |          |     |

NONE DETECTED  
 P=PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:

  
 TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

Reference Fraction:0010518-07A  
 Sample ID: KAUF-1-DG-MW-3  
 Sample Date Collected: 10/12/0016:26:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 76     | 125   | 75  |          |     |

ND=NONE DETECTED  
 =PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:   
 TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

Reference Fraction:0010518-08A

Sample ID: KAUF-1-CG-MW-4

Sample Matrix: WATER

Sample Date Collected: 10/12/0015:33:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 77     | 125   | 75  |          |     |

ND=NONE DETECTED

P= PRACTICAL QUANTITAION LIMIT

SS=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:

  
 TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
TO: PO BOX 215  
BLOOMFIELD, NM 87413  
JIM STRUHS  
PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
DATE COLLECTED: 10/12/00  
DATE RECEIVED: 10/18/00

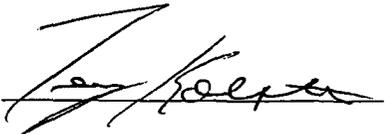
Reference Fraction:0010518-05A  
Sample ID: KAUF-1-DG-MW-5  
Sample Date Collected: 10/12/00 15:55:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | 1.01   | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | 1.25   | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | 2.88   | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 75     | 125   | 75  |          |     |

NONE DETECTED  
PQL=PRACTICAL QUANTITATION LIMIT  
SU=STANDARD UNITS  
B=DETECTED IN METHOD BLANK

APPROVED BY:

  
TERRY KOESTER  
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

Reference Fraction:0010518-01A  
 Sample ID: KAUF-1DG-MW-6  
 Sample Date Collected: 10/12/0017:21:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 77     | 125   | 75  |          |     |

ND=NONE DETECTED  
 =PRACTICAL QUANTITATION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:   
 TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
TO: PO BOX 215  
BLOOMFIELD, NM 87413  
JIM STRUHS  
PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
DATE COLLECTED: 10/12/00  
DATE RECEIVED: 10/18/00

Reference Fraction:0010518-04A  
Sample ID: KAUF-1-DG-MW-7  
Sample Date Collected: 10/12/0017:06:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 87     | 125   | 75  |          |     |

NONE DETECTED  
=PRACTICAL QUANTITAION LIMIT  
SU=STANDARD UNITS  
B=DETECTED IN METHOD BLANK

APPROVED BY:

  
TERRY KOESTER  
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0010518

SENT WILLIAMS GAS PIPELINE  
 TO: PO BOX 215  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 10/23/00  
 DATE COLLECTED: 10/12/00  
 DATE RECEIVED: 10/18/00

Reference Fraction: 0010518-06A  
 Sample ID: KAUF-1-DG-MW-8  
 Sample Date Collected: 10/12/00 16:46:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | 2.65   | UG/L  | 1.0 | 10/19/00 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 10/19/00 | KKL |
| ETHYLBENZENE    |           | 1.29   | UG/L  | 1.0 | 10/19/00 | KKL |
| TOTAL XYLENES   |           | 2.95   | UG/L  | 1.0 | 10/19/00 | KKL |
| BFB (SURROGATE) |           | 78     | 125   | 75  |          |     |

ND = NONE DETECTED  
 = PRACTICAL QUANTITATION LIMIT  
 SU = STANDARD UNITS  
 B = DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0101411-06A

Sample ID: KAUF1-DG-MW1

Sample Matrix: WATER

Sample Date Collected: 01/12/0112:29:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 114    | 125   | 75  |          |    |

ND=NONE DETECTED

=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

PROJECT: WES/KAUFMAN 1

Reference Fraction: 0101411-05A

Sample ID: KAUF1-DG-MW2

Sample Matrix: WATER

Sample Date Collected: 01/12/01 12:41:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 109    | 125   | 75  |          |    |

ND=NONE DETECTED

=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

PROJECT: WES/KAUFMAN 1

Reference Fraction: 0101411-08A

Sample ID: KAUF1-CG-MW3

Sample Matrix: WATER

Sample Date Collected: 01/12/01 12:53:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 109    | 125   | 75  |          |    |

ND=NONE DETECTED

PL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

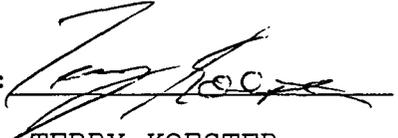
Reference Fraction: 0101411-07A  
 Sample ID: KAUF1-UG-MW4  
 Sample Date Collected: 01/12/01 13:04:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | 2.14   | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 117    | 125   | 75  |          |    |

ND=NONE DETECTED  
 =PRACTICAL QUANTITATION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
TO: 187 COUNTY ROAD # 4980  
BLOOMFIELD, NM 87413  
JIM STRUHS  
PROJECT: WES/KAUFMAN 1

DATE REPORTED: 01/22/01  
DATE COLLECTED: 01/12/01  
DATE RECEIVED: 01/17/01

Reference Fraction:0101411-01A  
Sample ID: KAUF1-UG-MW5  
Sample Date Collected: 01/12/0113:17:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 112    | 125   | 75  |          |    |

NONE DETECTED  
P=PRACTICAL QUANTITAION LIMIT  
SU=STANDARD UNITS  
B=DETECTED IN METHOD BLANK

APPROVED BY:

  
TERRY KOESTER  
LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

PROJECT: WES/KAUFMAN 1

Reference Fraction: 0101411-02A

Sample ID: KAUF1-DG-MW6

Sample Matrix: WATER

Sample Date Collected: 01/12/01 13:31:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 111    | 125   | 75  |          |    |

ND=NONE DETECTED

PL=PRACTICAL QUANTITATION LIMIT

SS=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

Reference Fraction:0101411-04A  
 Sample ID: KAUF1-SA-MW7  
 Sample Date Collected: 01/12/0113:45:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 113    | 125   | 75  |          |    |

ND=NONE DETECTED  
 =PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0101411

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD # 4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 01/22/01  
 DATE COLLECTED: 01/12/01  
 DATE RECEIVED: 01/17/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0101411-03A

Sample ID: KAUF1-UG-MW8

Sample Matrix: WATER

Sample Date Collected: 01/12/0113:59:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY |
|-----------------|-----------|--------|-------|-----|----------|----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |    |
| BENZENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 01/18/01 | MB |
| BFB (SURROGATE) |           | 116    | 125   | 75  |          |    |

N=NONE DETECTED  
 P=PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY:



TERRY KOESTER  
 LABORATORY DIRECTOR

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT *WILLIAMS GAS PIPELINE*  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0105038-01A

Sample ID: KAUF1-UG-MW1

Sample Matrix: WATER

Sample Date Collected: 04/25/0115:20:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 102    | 125   | 75  |          |     |

=NONE DETECTED  
 L=PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR

*TK*

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0105038-05A

Sample ID: KAUF1-SA-MW3

Sample Matrix: WATER

Sample Date Collected: 04/25/0116:21:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 100    | 125   | 75  |          |     |

ND=NONE DETECTED  
 =PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR

*Tu*

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
TO: 187 COUNTY ROAD #4980  
BLOOMFIELD, NM 87413  
JIM STRUHS

DATE REPORTED: 05/11/01  
DATE COLLECTED: 04/25/01  
DATE RECEIVED: 05/01/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0105038-03A

Sample ID: KAUF1-DG-MW4

Sample Matrix: WATER

Sample Date Collected: 04/25/0116:12:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 99     | 125   | 75  |          |     |

N=NONE DETECTED

P=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
LABORATORY DIRECTOR

*(Signature)*

Q W A L L A B O R A T O R I E S , I N C .

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

PROJECT: WES/KAUFMAN 1

Reference Fraction:0105038-04A

Sample ID: KAUF1-DG-MW5

Sample Matrix: WATER

Sample Date Collected: 04/25/0116:03:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 97     | 125   | 75  |          |     |

=NONE DETECTED

L=PRACTICAL QUANTITAION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR

*TK*

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

Reference Fraction:0105038-02A  
 Sample ID: KAUF1-UG-MW6  
 Sample Date Collected: 04/25/0115:30:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | 1.78   | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 97     | 125   | 75  |          |     |

NONE DETECTED  
 L=PRACTICAL QUANTITAION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR  
*TK*

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS  
 PROJECT: WES/KAUFMAN 1

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

Reference Fraction: 0105038-06A  
 Sample ID: KAUF1-DG-MW7  
 Sample Date Collected: 04/25/01 15:42:00

Sample Matrix: WATER

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 100    | 125   | 75  |          |     |

N=NONE DETECTED  
 L=PRACTICAL QUANTITATION LIMIT  
 SU=STANDARD UNITS  
 B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR  
 TK

Q W A L L A B O R A T O R I E S, I N C.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105038

SENT WILLIAMS GAS PIPELINE  
 TO: 187 COUNTY ROAD #4980  
 BLOOMFIELD, NM 87413  
 JIM STRUHS

DATE REPORTED: 05/11/01  
 DATE COLLECTED: 04/25/01  
 DATE RECEIVED: 05/01/01

PROJECT: WES/KAUFMAN 1

Reference Fraction: 0105038-07A

Sample ID: KAUF1-DG-MW8

Sample Matrix: WATER

Sample Date Collected: 04/25/01 15:50:00

| TEST            | METHOD    | RESULT | UNITS | PQL | ANALYZED | BY  |
|-----------------|-----------|--------|-------|-----|----------|-----|
| BTEX            | OA1/8021B |        |       | 3.0 |          |     |
| BENZENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOLUENE         |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| ETHYLBENZENE    |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| TOTAL XYLENES   |           | ND     | UG/L  | 1.0 | 05/04/01 | KKL |
| BFB (SURROGATE) |           | 94     | 125   | 75  |          |     |

NR=NONE DETECTED

PL=PRACTICAL QUANTITATION LIMIT

SU=STANDARD UNITS

B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER

TERRY KOESTER  
 LABORATORY DIRECTOR

*TK*



# ORGANIC ANALYSIS REPORT

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 10, 2001

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-01A  
Field Sample ID: Kauf 1-MW1  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

## Analytical Results

## MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

### Compound

| Reporting Limit | Amount Detected |
|-----------------|-----------------|
| 0.0010          | < 0.0010        |
| 0.0020          | < 0.0020        |
| 0.0020          | < 0.0020        |
| 0.0020          | < 0.0020        |

Benzene

Toluene

Ethylbenzene

Total Xylene

(801) 263-8686  
Toll Free (888) 263-8686  
Fax (801) 263-8687  
e-mail: awal@xmission.com

Kyle F. Gross  
Laboratory Director

Peggy McNicol  
QA Officer

Released by:

Laboratory Supervisor

Report Date: October 19, 2001 Page 1 of 1



ORGANIC ANALYSIS REPORT

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 10, 2001

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-07A  
Field Sample ID: Kauf 1-MW3  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting  
Limit

Amount  
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

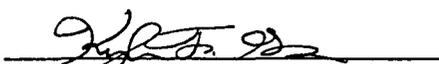
< 0.0020

(801) 263-8686  
Toll Free (888) 263-8686  
Fax (801) 263-8687  
e-mail: awal@xmission.com

Kyle F. Gross  
Laboratory Director

Peggy McNicol  
QA Officer

Released by:

  
Laboratory Supervisor

Report Date:

October 19, 2001

Page 1 of 1



ORGANIC ANALYSIS REPORT

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 10, 2001

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-03A  
Field Sample ID: Kauf 1-MW4  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting Limit      Amount Detected

Benzene      0.0010      < 0.0010

Toluene      0.0020      < 0.0020

Ethylbenzene      0.0020      < 0.0020

Total Xylene      0.0020      < 0.0020

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Report Date: October 19, 2001 Page 1 of 1



# ORGANIC ANALYSIS REPORT

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 15, 2001

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-02A  
Field Sample ID: **Kauf 1-MW5**  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

## Analytical Results

## MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

### Compound

Reporting  
Limit

Amount  
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

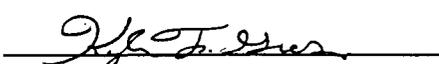
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Page 1 of 1



# ORGANIC ANALYSIS REPORT

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 10, 2001

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-06A  
Field Sample ID: **Kauf 1-MW6**  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

## Analytical Results

## MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

### Compound

Reporting  
Limit

Amount  
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

< 0.0020

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Page 1 of 1



# ORGANIC ANALYSIS REPORT

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001

Contact: Jim Struhs  
Analyzed: October 10, 2001

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Analysis Requested: SW8260B/5030A

Lab Sample ID: L47829-04A  
Field Sample ID: Kauf 1-MW7  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

## Analytical Results

## MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

### Compound

| <u>Reporting Limit</u> | <u>Amount Detected</u> |
|------------------------|------------------------|
| 0.0010                 | < 0.0010               |
| 0.0020                 | < 0.0020               |
| 0.0020                 | < 0.0020               |
| 0.0020                 | < 0.0020               |

Benzene

Toluene

Ethylbenzene

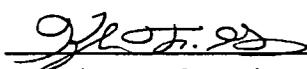
Total Xylene

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Page 1 of 1



ORGANIC ANALYSIS REPORT

AMERICAN  
WEST  
ANALYTICAL  
LABORATORIES

Client: Mile High Environmental  
Collected: October 1, 2001  
Received: October 5, 2001  
Analysis Requested: SW8260B/5030A

Contact: Jim Struhs  
Analyzed: October 15, 2001

Lab Sample ID: L47829-05A  
Field Sample ID: Kauf 1-MW8  
Site ID: Kaufman #1 / SWA-100401-04

463 West 3600 South  
Salt Lake City, Utah  
84115

Analytical Results

MBTEXN/TPH-P

Units = mg/L

Final Dilution Factor: 1

Compound

Reporting  
Limit

Amount  
Detected

Benzene

0.0010

< 0.0010

Toluene

0.0020

< 0.0020

Ethylbenzene

0.0020

< 0.0020

Total Xylene

0.0020

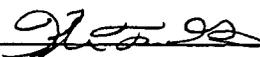
< 0.0020

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Report Date: October 19, 2001 Page 1 of 1