



# Highlander Environmental Corp.

Midland, Texas

October 11, 2006

RP # 1074

Mr. Larry Johnson  
Environmental Engineer Specialist  
Oil Conservation Division- District I  
1625 N. French Drive  
Hobbs, New Mexico 88240

**RE: Assessment and Work Plan for the Southwest Royalties, Inc., Farnsworth Federal B #5 Well, Unit Letter L, Section 7, Township 26 South, Range 37 East, Lea County, New Mexico.**

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by Southwest Royalties, Inc. (Southwest) to assess and to remediate the soil impact from a well blow out that occurred at the Farnsworth Federal B #5 Well and the Farnsworth Federal Tank Battery, located in Unit Letter L, Section 7, Township 26 South, Range 37 East, Lea County, New Mexico. The well site coordinates are N 32.05586°, W 103.20828°. The State of New Mexico C-141 (Initial) is included in Appendix C. The well and the tank battery location are shown on Figure 1.

## Background

On August 23, 2006, the well apparently pressured up and the fluids flowed up the backside of the well. A gas pocket or air bubbles may have caused the connection to blow off the wellhead. At the time of the release, the oil tanks at the tank battery were full and the tanks overflowed. The volume released at the well and the tank battery was unknown. An estimated 125 barrels of oil was recovered at the well and 145 barrels at the tank battery.

The release at the well impacted an area estimated at 2 to 4 acres with the majority of the impact being overspray. At the tank battery, oil was observed on the pad, drive area and out into the pasture. The impacted areas are further discussed in the Assessment and Sample Results Section of the report. The spill locations are shown on Figures 2 and 3.

Application # PACO 62858447

## **Groundwater and Regulatory**

The spill areas are located in Section 7, Township 26 South, Range 37 East. The USGS data base reported a depth to water at 196' in Section 7, Township 26 South, Range 37 East. The State of New Mexico Well Reports did not show any water wells in Section 7. However, there were water wells shown in Sections 29 and 35, Township 25 South, Range 37 East with average groundwater depths of approximately 219' to 185' below surface. In addition, published data, from the Geology and Groundwater Conditions in Southern New Mexico, shows wells in Section 2, 12 and 14, Township 26 South, Range 37 East with reported depths of 103', 102' and 100', respectively. The State of New Mexico Well Reports, USGS report and published reports are included in Appendix A.

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene and xylene). Based on the regional groundwater data, the proposed RRAL for TPH is 5,000 mg/kg.

## **Assessment and Sample Results**

### Well #5

On August 24 2006, Highlander personnel inspected and sampled the spill areas. At Well #5, the majority of the surface staining was due to overspray northeast of the well. The impacted area where fluids accumulated north of the well measured approximately 85' x 180'. The impacted areas are shown on Figure 2. A total of four (4) auger holes were installed in this area to assess the impacted soils. Soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO and chloride by EPA method 300.0. Selected samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B. The sample results are presented in Table 1. The laboratory reports are included in Appendix B.

On August 25, 2006, Highlander personnel applied a Micro-blaze product to the overspray area. The treatment was applied to the vegetation to wash oil residue from the foliage. This area will be inspected for further applications and growth of the vegetation.

Referring to Table 1, the hydrocarbon impact to the soils appears to be shallow. AH-2, AH-3 and AH-4 exceeded the TPH RRAL of 5,000 mg/kg at 0-1', however, the deeper samples at 1-1.5' were all below the RRAL. The BTEX concentrations did not exceed the RRAL. Chloride concentrations were elevated in the shallow soil samples at 0-1' ranging from 1,480 mg/kg to 8,510 mg/kg. The area of AH-3 did show a deeper



impact to a depth of 2.0' below surface, with a chloride concentration decreasing from 12,100 mg/kg at 1.0' below surface to <5.0 mg/kg at 3.0' below surface.

#### Tank Battery

On August 25, 2006, Highlander personnel inspected and sampled the spill areas. The area north of the tanks did show oil staining where the tanks overflowed. The impacted area inside the facility fence line measured approximately 45' x 90'. The impacted area in the drive area measured approximately 20' x 150' and the area off the facility pad measured approximately 20' x 60'. The impacted areas are shown on Figure 3. A total of five (5) auger holes were installed in the impacted area to assess the soils. Soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO and chloride by EPA method 300.0. Selected samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B. The sample results are presented in Table 1. The laboratory reports are included in Appendix B.

Referring to Table 3, AH-1, AH-3 and AH-4 exceeded the TPH RRAL at 0-1'. The TPH exceeded the RRAL to approximately 3.0' in the area of AH-2. BTEX concentrations did not exceed the RRAL. The chloride detected in the auger holes did not show a significant impact to the Site. The chlorides in the shallow soils 0-1' ranged from 369 mg/kg to 523 mg/kg. The deeper samples showed a declining chloride with depth, with the exception of AH-3 where the chloride concentration remained the consistent approximately 500 mg/kg.

#### **Work Plan**

##### Well #5

The hydrocarbon impact at the Site is limited to the shallow soils at 0-1' below surface. Chloride concentrations were elevated to depths ranging from 1'-3' below surface. To properly remediate the impacted area, the soils with levels exceeding the RRAL for TPH and elevated chloride will be removed and hauled to Sundance Services for disposal. Once removed, the area will be backfilled with clean fill material. In addition, the overspray areas will be monitored for growth or for additional Micro-Blaze treatments.

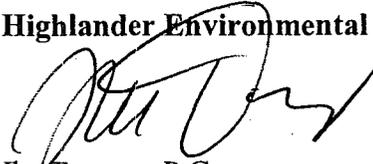
##### Tank Battery

The hydrocarbon impact in the area is limited to 1'-3' below surface. Based on the results, the chloride concentrations do not appear to be an environmental concern. The areas exceeding the TPH RRAL at 1-3' will be excavated and blended below the RRAL. Confirmation samples will be collected from the remediated soils (stockpile) for evaluation. Once below the RRAL, the soil will either be placed back into the excavation or used as dike material at the facility.



Once completed, the results of the remedial activities, along with recommendations for further investigation or remediation, if any, will be submitted to the NMOCD. If you require any additional information or have any questions or comments, please call.

**Highlander Environmental Corp.**

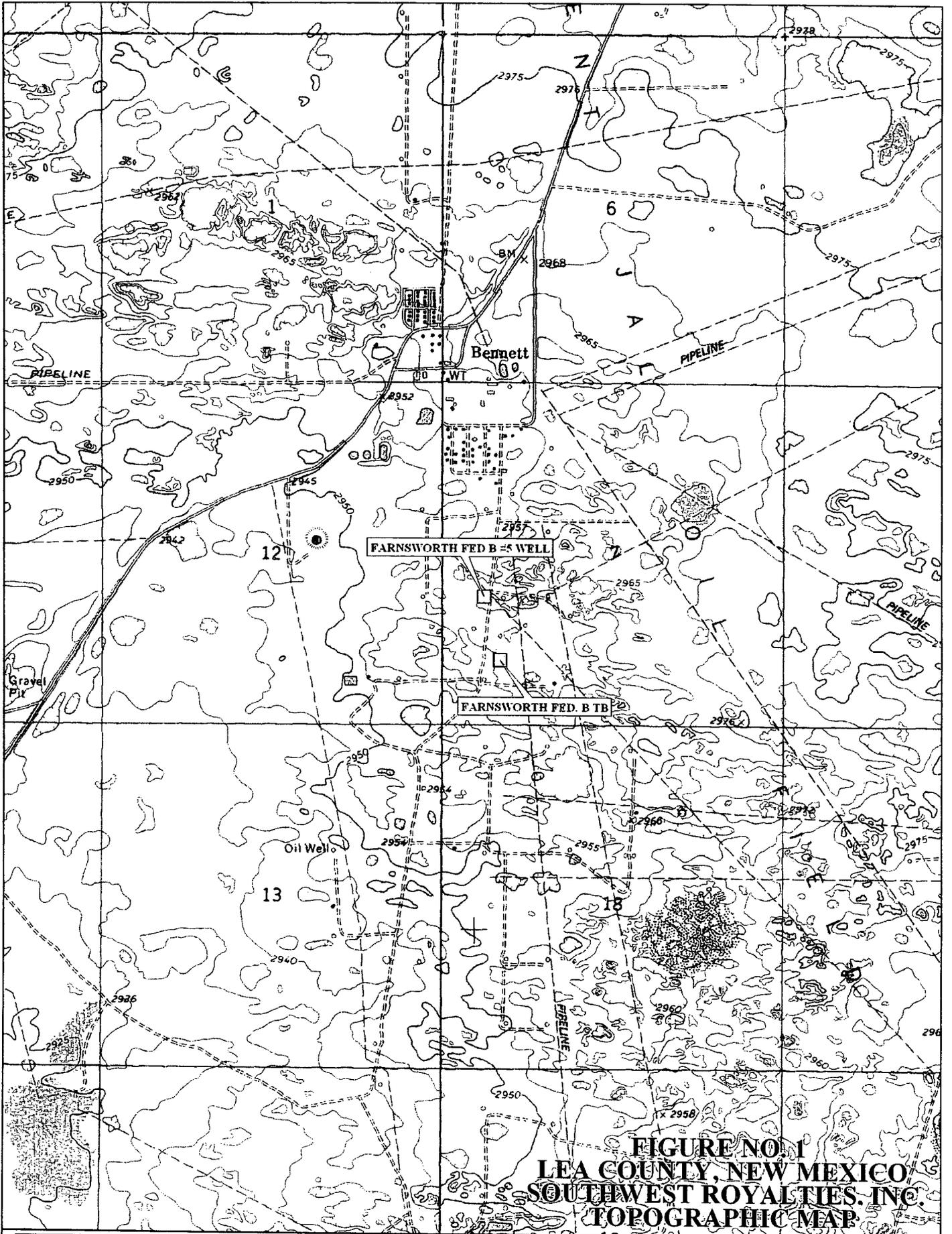


Ike Tavarez, P.G.  
Project Manager/Senior Geologist

cc: Mat Sweic - SWR  
Dawn Howard



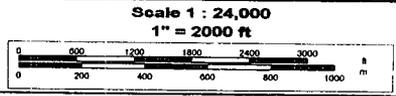
**FIGURES**



**FIGURE NO. 1  
LEA COUNTY, NEW MEXICO  
SOUTHWEST ROYALTIES, INC.  
TOPOGRAPHIC MAP**



© 2002 DeLorme. 3-D TopoQuads®. Data copyright of content owner.  
www.delorme.com



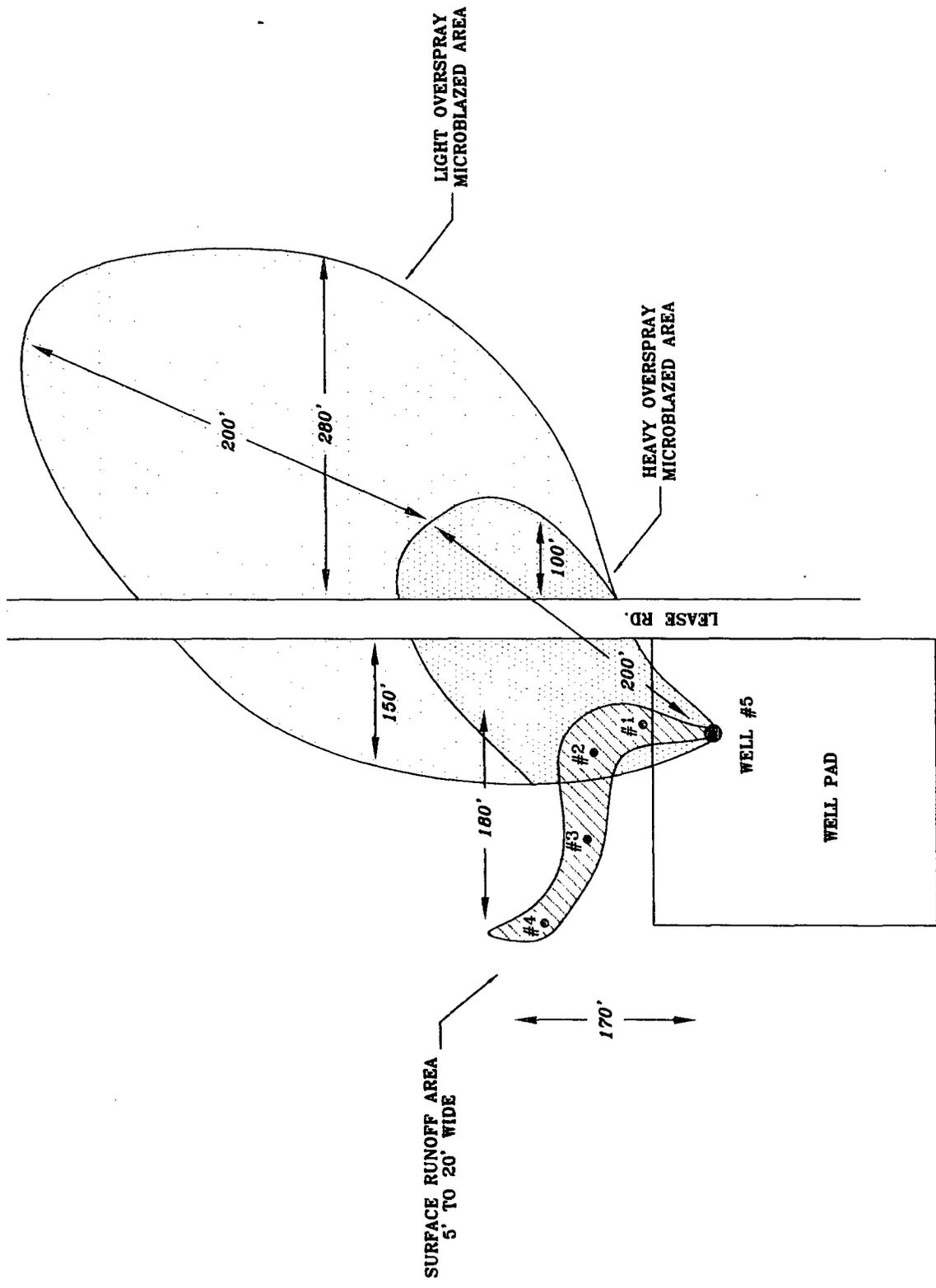


FIGURE NO. 2

LEA COUNTY, NEW MEXICO

SOUTHWEST ROYALTIES, INC.  
FARNSWORTH FED. B #5 WELL

HIGHLANDER ENVIRONMENTAL CORP.  
MIDLAND, TEXAS

|          |                      |
|----------|----------------------|
| DATE:    | 10/9/06              |
| DWN. BY: | JJ                   |
| FILE:    | ENV/0374             |
| PROJECT: | FARNSWORTH FED. B #5 |

- LIGHT OVERSPRAY
- HEAVY OVERSPRAY
- SPILL AREA
- SAMPLE LOCATIONS

NOT TO SCALE

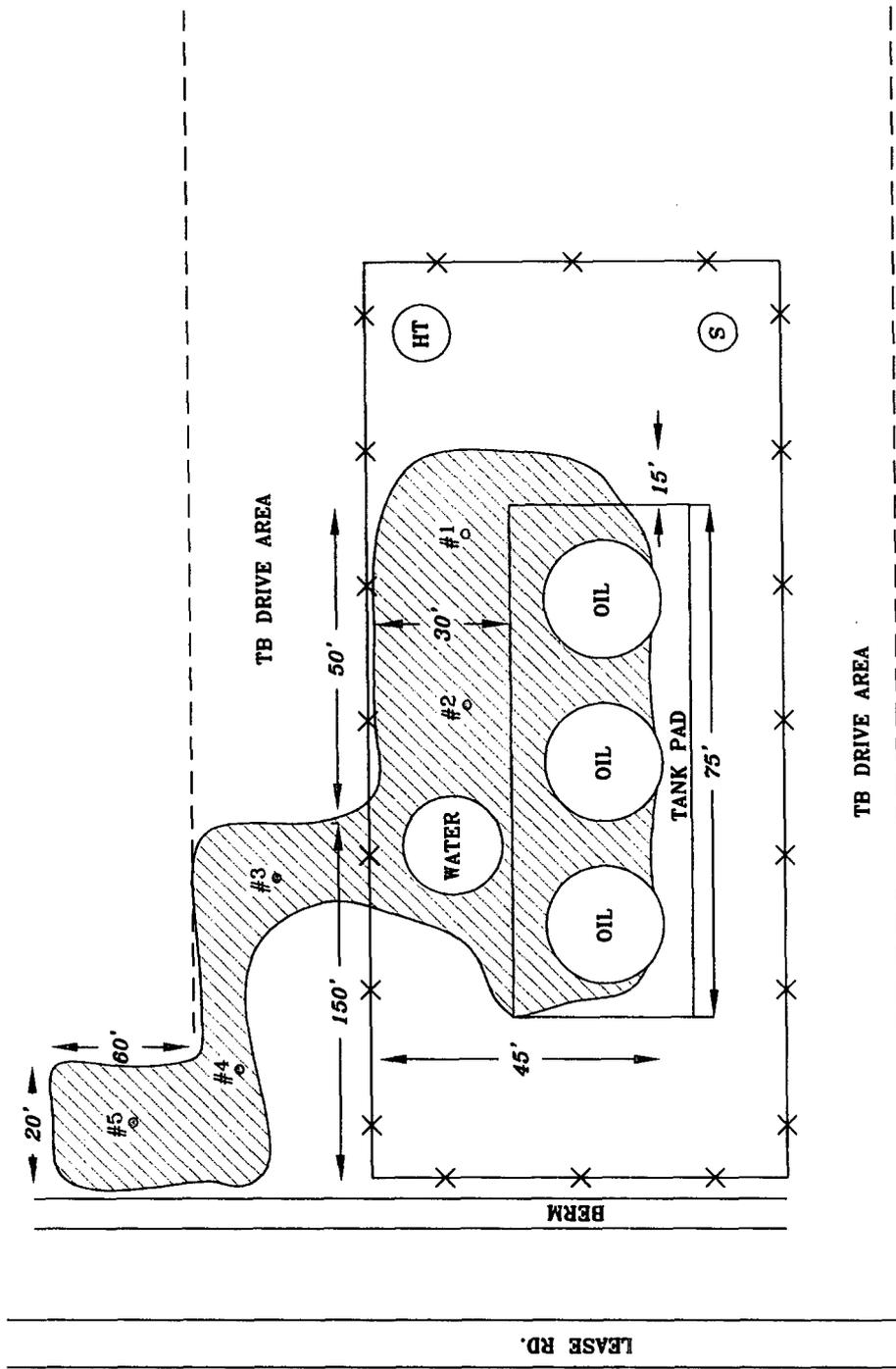


FIGURE NO. 3

LEA COUNTY, NEW MEXICO

SOUTHWEST ROYALTIES, INC.  
FARNSWORTH FED. B TB

HIGHLANDER ENVIRONMENTAL CORP.  
MIDLAND, TEXAS

DATE: 10/9/06

DWN. BY: JJ

FILE: C:\WORK\274 FARNSWORTH FED. B TB

SPILL AREA  
SAMPLE LOCATIONS

NOT TO SCALE

**TABLES**

Table 1  
 Southwest Royalties, Inc.  
 Farnsworth Federal B #5  
 Lea County, New Mexico

| Sample ID | Date Sampled | Sample Depth (ft) | TPH (mg/kg) |         |         | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (m/p) (mg/kg) | Xylene (o) (mg/kg) | Chloride (mg/kg) |
|-----------|--------------|-------------------|-------------|---------|---------|-----------------|-----------------|----------------------|----------------------|--------------------|------------------|
|           |              |                   | C6-C12      | C12-C28 | C28-C35 |                 |                 |                      |                      |                    |                  |
| AH-1      | 8/24/2006    | 0-1.0             | 205         | 1,270   | 178     | <0.05           | 0.059           | 0.114                | 0.289                | 0.113              | 2540             |
|           | 8/24/2006    | 1-1.5             | <50         | 973.0   | 277     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 273              |
| AH-2      | 8/24/2006    | 0-1.0'            | 4,810       | 18,300  | 1,550   | 0.205           | 1.58            | 1.26                 | 3.28                 | 1.46               | 6,890            |
|           | 8/24/2006    | 1-1.5             | <50         | 466.0   | 155     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 406              |
| AH-3      | 8/24/2006    | 0-1.0'            | 1,970       | 6,650   | 665     | 0.113           | 0.992           | 0.724                | 1.92                 | 0.808              | 8,510            |
|           | 8/24/2006    | 1-1.5             | <10         | <10     | <10     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 12,100           |
|           | 8/24/2006    | 2-2.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | 3,200            |
|           | 8/24/2006    | 3-3.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | <5               |
| AH-4      | 8/24/2006    | 0-1.0'            | 5,960       | 21,100  | 1,670   | 0.225           | 1.83            | 1.30                 | 3.63                 | 1.31               | 1,480            |
|           | 8/24/2006    | 1-1.5             | <50         | 475.0   | 129     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 8.34             |

(-) Not Analyzed

**Table 2**  
**Southwest Royalties, Inc.**  
**Farnsworth Federal B Tank Battery**  
**Lea County, New Mexico**

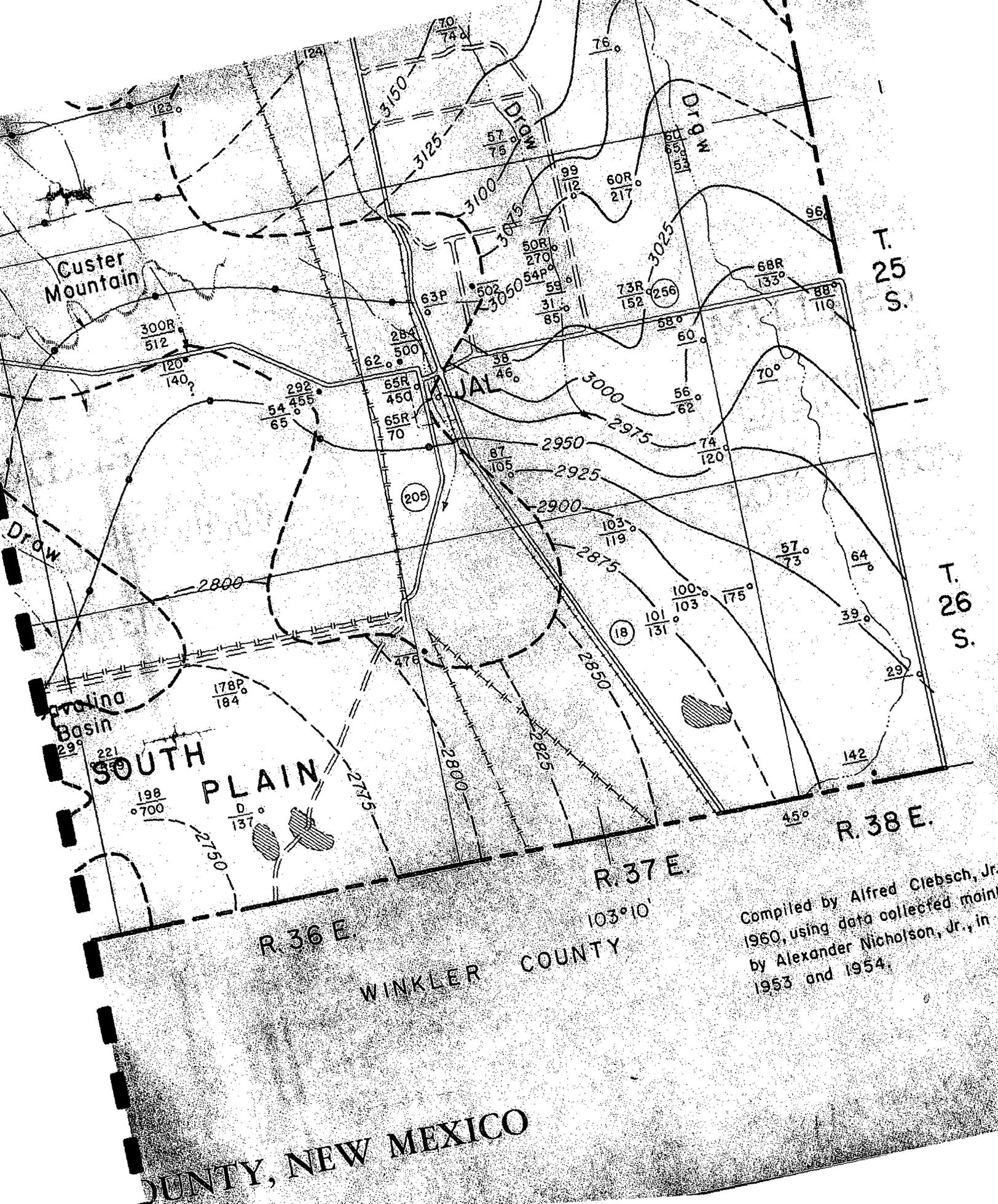
| Sample ID | Date Sampled | Sample Depth (ft) | TPH (mg/kg) |         |         | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylene (m/p) (mg/kg) | Xylene (o) (mg/kg) | Chloride (mg/kg) |
|-----------|--------------|-------------------|-------------|---------|---------|-----------------|-----------------|----------------------|----------------------|--------------------|------------------|
|           |              |                   | C6-C12      | C12-C28 | C28-C35 |                 |                 |                      |                      |                    |                  |
| AH-1      | 8/25/2006    | 0-1.0             | 379         | 12,300  | 1,910   | <0.025          | 0.079           | 0.0839               | 0.365                | 0.103              | 429              |
|           | 8/25/2006    | 1-1.5             | <10         | 239     | 78.3    | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 62               |
|           | 8/25/2006    | 2-2.5             | <50         | 1,040.0 | 285     |                 |                 |                      |                      |                    | 40               |
|           | 8/25/2006    | 3-3.5             |             |         |         |                 |                 |                      |                      |                    | 43.8             |
| AH-2      | 8/25/2006    | 0-1.0'            | 1,590       | 19,100  | 3,160   | 0.0435          | 0.589           | 0.371                | 1.76                 | 0.45               | 408              |
|           | 8/25/2006    | 1-1.5             | 160.0       | 16,900  | 3,400   | -               | -               | -                    | -                    | -                  | 176              |
|           | 8/25/2006    | 2-2.5             | 163.0       | 6,330   | 1,300   | -               | -               | -                    | -                    | -                  | 81.9             |
|           | 8/25/2006    | 4-4.5             | <50         | 530     | 243     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 26               |
|           | 8/25/2006    | 5-5.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | 41               |
| AH-3      | 8/25/2006    | 0-1.0'            | 50.9        | 4,220   | 1,010   | <0.025          | <0.025          | <0.025               | 0.0463               | <0.025             | 523              |
|           | 8/25/2006    | 1-1.5             | <10         | <10     | <10     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 541              |
|           | 8/25/2006    | 2-2.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | 508              |
| AH-4      | 8/25/2006    | 0-1.0'            | 3,540       | 10,300  | 963     | 0.762           | 3.94            | 2.55                 | 9.05                 | 2.04               | 369              |
|           | 8/25/2006    | 1-1.5             | <10         | 208     | 73      | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 36.3             |
|           | 8/25/2006    | 2-2.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | 45.5             |
| AH-5      | 8/25/2006    | 0-1.0'            | 560.0       | 1,460   | 108     | 0.340           | 2.09            | 1.49                 | 3.08                 | 1.17               | 244              |
|           | 8/25/2006    | 1-1.5             | <10         | <10     | <10     | <0.025          | <0.025          | <0.025               | <0.025               | <0.025             | 47.5             |
|           | 8/25/2006    | 2-2.5             | -           | -       | -       | -               | -               | -                    | -                    | -                  | 197              |

( - ) Not Analyzed

**APPENDIX A**

**Groundwater Data**





Compiled by Alfred Crebsch, Jr.  
 1960, using data collected mainly  
 by Alexander Nicholson, Jr., in  
 1953 and 1954.

TABLE 6. RECORDS OF WELLS IN SOUTHERN LEA COUNTY, N. MEX. (continued)

| Location No. | Owner           | Aquifer | Depth of well (feet) | Altitude of well (feet) | Water level                     |               |                           | Year completed | Surface diameter of wells | Method of lift | Use of water   | Remarks |
|--------------|-----------------|---------|----------------------|-------------------------|---------------------------------|---------------|---------------------------|----------------|---------------------------|----------------|--|---------|
|              |                 |         |                      |                         | Depth below land surface (feet) | Date measured | Surface diameter of wells |                |                           |                |  |         |
| 25.38.19.342 | Pure Oil Co.    | To(?)   | 133                  | 3,061                   | 68                              | 1952          | —                         | —              | —                         | In             | Dollarhide Gasoline Plant well 2.  |         |
| 21.121       | Tom Linebury    | To      | 110                  | 3,103                   | 87.7                            | 2-12-53       | —                         | 7              | Lw                        | S              | —  |         |
| 29.131       | —               | Qal     | —                    | 3,040                   | 69.9                            | 2-15-53       | —                         | 6              | Lw                        | N              | —  |         |
| 26.32.21.322 | Battle Ax Ranch | Tr(?)   | 253                  | 3,140                   | 180                             | 7-23-54       | —                         | —              | Li                        | D,S            | —  |         |
| 26.33.3.444  | W. D. Dinwiddie | Qal     | 180                  | 3,315                   | 102.8                           | 7-23-54       | —                         | 6              | N                         | N              | —  |         |
| 3.444a       | do.             | Qal     | —                    | 3,315                   | —                               | —             | —                         | 6(?)           | Lw                        | S              | Chemical analysis in table 8. Located 50 feet west of 26.33.3.444.         |         |
| 9.443        | —               | Qal(?)  | —                    | 3,280                   | 106.6                           | 7-26-54       | —                         | —              | Lw                        | S              | —  |         |
| 22.433       | Battle Ax Ranch | Qal     | 200(?)               | 3,270                   | 79.7                            | 7-26-54       | —                         | 6              | Lw                        | S              | —  |         |
| 26.34.6.213  | —               | Tr      | 360                  | 3,330                   | 141.9                           | 7-23-54       | —                         | 8              | Lw                        | S              | —  |         |
| 26.35.13.222 | —               | Qal     | —                    | 2,990                   | 229.1                           | 12-12-58      | —                         | 7              | Lw                        | S              | Chemical analysis in table 8.  |         |
| 26.36.9.440  | Frank Anthneys  | Qal     | 184M                 | 2,940                   | 177.8                           | 12-12-58      | —                         | 7              | Lw                        | D,S            | MWP  |         |
| 18.311       | City of Jal     | Qal     | 559                  | 2,961                   | 220.8                           | 3-17-60       | 1960                      | 24             | Te(?)                     | P              | Yield 453 gpm. Gravel packed. WBZ 275-300, 400-465, 500-530 feet.          |         |
| 19.233       | do.             | Qal     | 700                  | 2,950                   | 198.0                           | —             | 1960                      | 24             | Te(?)                     | P              | Yield 408 gpm. Gravel packed. WBZ 270-280, 400-480, 550-600, 670-680 feet. |         |
| 21.443       | —               | —       | 137(?)               | 2,900                   | Dry                             | 12-11-58      | —                         | 11             | N                         | N              | —  |         |
| 26.37.2.133  | Clyde Cooper    | Qal(?)  | 119                  | 3,000                   | 103.4                           | 2-16-53       | 1937                      | 8              | Lw                        | S              | —  |         |
| 7.331        | EPNG            | Tr      | 476                  | 2,960                   | —                               | —             | 1937                      | 85%            | Te                        | In,D           | Jal Plant 1, well 1.   |         |
| 12.314       | —               | Qal     | —                    | 3,010                   | 102.3                           | 2-16-53       | —                         | 3              | N                         | N              | —  |         |
| 12.331       | —               | Qal     | 103 ± M              | 3,000                   | 99.9                            | 2-17-53       | —                         | 3              | N                         | N              | —  |         |
| 12.441       | Humble Oil Co.  | Qal     | 175                  | —                       | —                               | —             | 1944                      | —              | —                         | —              | Cased shothole.  |         |
| 14.122       | —               | Qal     | 131M                 | 2,985                   | 100.6                           | 2-17-53       | —                         | 3              | N                         | N              | WBZ 125-150 feet. EY 68 gpm.   |         |
| 26.38.7.244  | Tom Linebury    | Qal     | 73                   | 3,000                   | 57.1                            | 2-24-53       | —                         | 8 1/2          | N                         | N              | Cased shothole.  |         |
| 8.444        | do.             | Qal     | 66                   | 3,000                   | 64.5                            | 2-24-53       | —                         | 6 1/2          | Lw                        | S              | —  |         |
| 17.414       | do.             | Qal     | —                    | 2,975                   | 39.4                            | 2-24-53       | —                         | 5 1/2          | Lw                        | S              | —  |         |
| 21.344       | do.             | Qal     | —                    | 2,955                   | 29.0                            | 2-13-53       | —                         | 3              | N                         | N              | —  |         |
| 32.141       | do.             | Tr(?)   | —                    | 2,950                   | 142.4                           | 2-13-53       | —                         | 26             | N                         | N              | Cased shothole.  |         |

TABLE 7. RECORDS OF SELECTED WELLS IN TEXAS ADJACENT TO SOUTHERN LEA COUNTY, N. MEX.  
 Explanations of symbols are included in the headnotes of Table 6.

| Location No.         | Owner          | Aquifer | Depth of well (feet) | Altitude of well (feet) | Water level                |          | Date measured | Year completed | Surface diam. of wells | Method of lift | Use of water | Remarks |
|----------------------|----------------|---------|----------------------|-------------------------|----------------------------|----------|---------------|----------------|------------------------|----------------|--------------|---------|
|                      |                |         |                      |                         | Depth below surface (feet) | Surface  |               |                |                        |                |              |         |
| A-12.25.341          | —              | To      | 50(?)                | 3,545                   | 40.8                       | 12-9-53  | —             | 6              | Lw                     | N              | —            | —       |
| A-28.3.413           | Greenwood      | —       | —                    | 3,485                   | 35.1                       | 12-9-53  | —             | —              | Lw                     | S              | —            | —       |
| Gaines County Tex.   |                |         |                      |                         |                            |          |               |                |                        |                |              |         |
| A-29.17.320          | H. O. Sims     | To(?)   | 82                   | 3,510                   | 79.4                       | 7-28-40  | —             | —              | Lw                     | S              | —            | —       |
| A-39.4.320           | do.            | To      | 81                   | 3,478                   | 72.4                       | 10-9-53  | —             | 6½             | Lw                     | S              | —            | —       |
| A-39.14.111          | Humble Oil Co. | —       | 215                  | 3,410                   | Dry                        | —        | —             | —              | —                      | —              | —            | —       |
| A-40.16.330          | M. L. Goins    | To      | 80                   | 3,305                   | 74.1                       | 10-15-53 | —             | —              | Lw                     | D,S            | —            | —       |
| Winkler County, Tex. |                |         |                      |                         |                            |          |               |                |                        |                |              |         |
| C-22.6               | Tom Linebury   | Qal     | —                    | 2,940                   | 45.0                       | 2-13-53  | —             | 6              | N                      | N              | —            | —       |

Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320104103120301

Save file of selected sites to local disk for future upload

USGS 320104103120301 26S.37E.19.433143

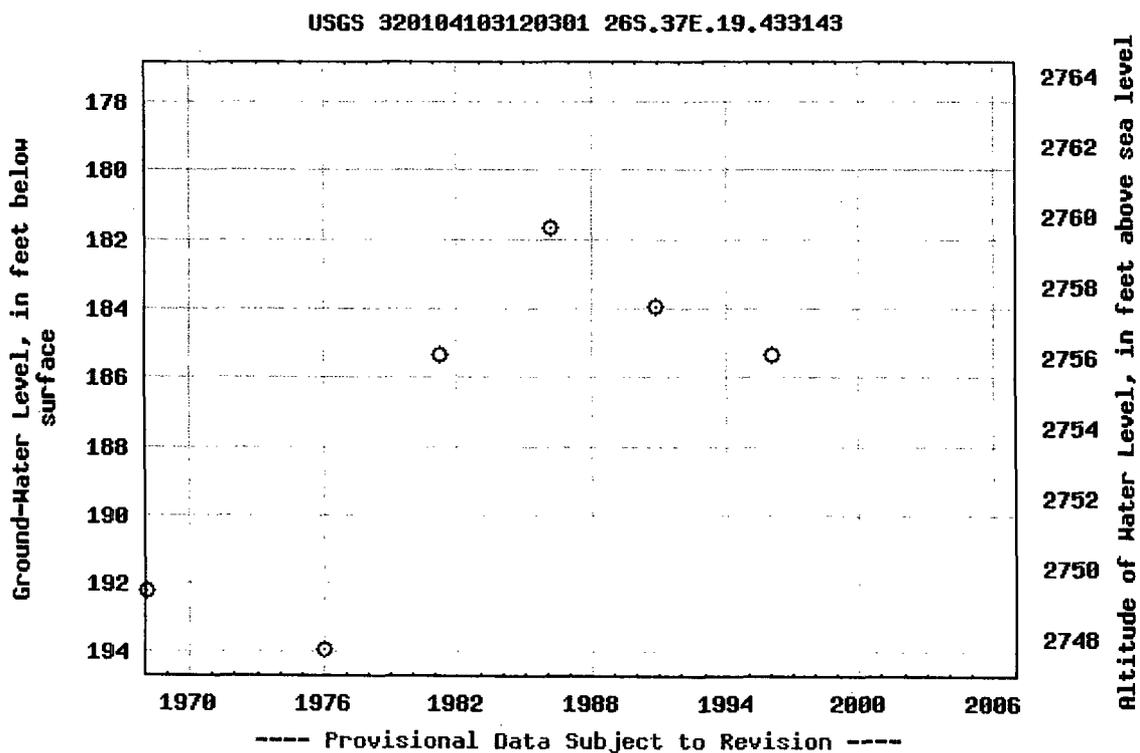
Available data for this site Ground-water: Field measurements

GO

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°01'04", Longitude 103°12'03" NAD27  
 Land-surface elevation 2,941.40 feet above sea level NGVD29  
 The depth of the well is 500 feet below land surface.  
 This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320251103071401

Save file of selected sites to local disk for future upload

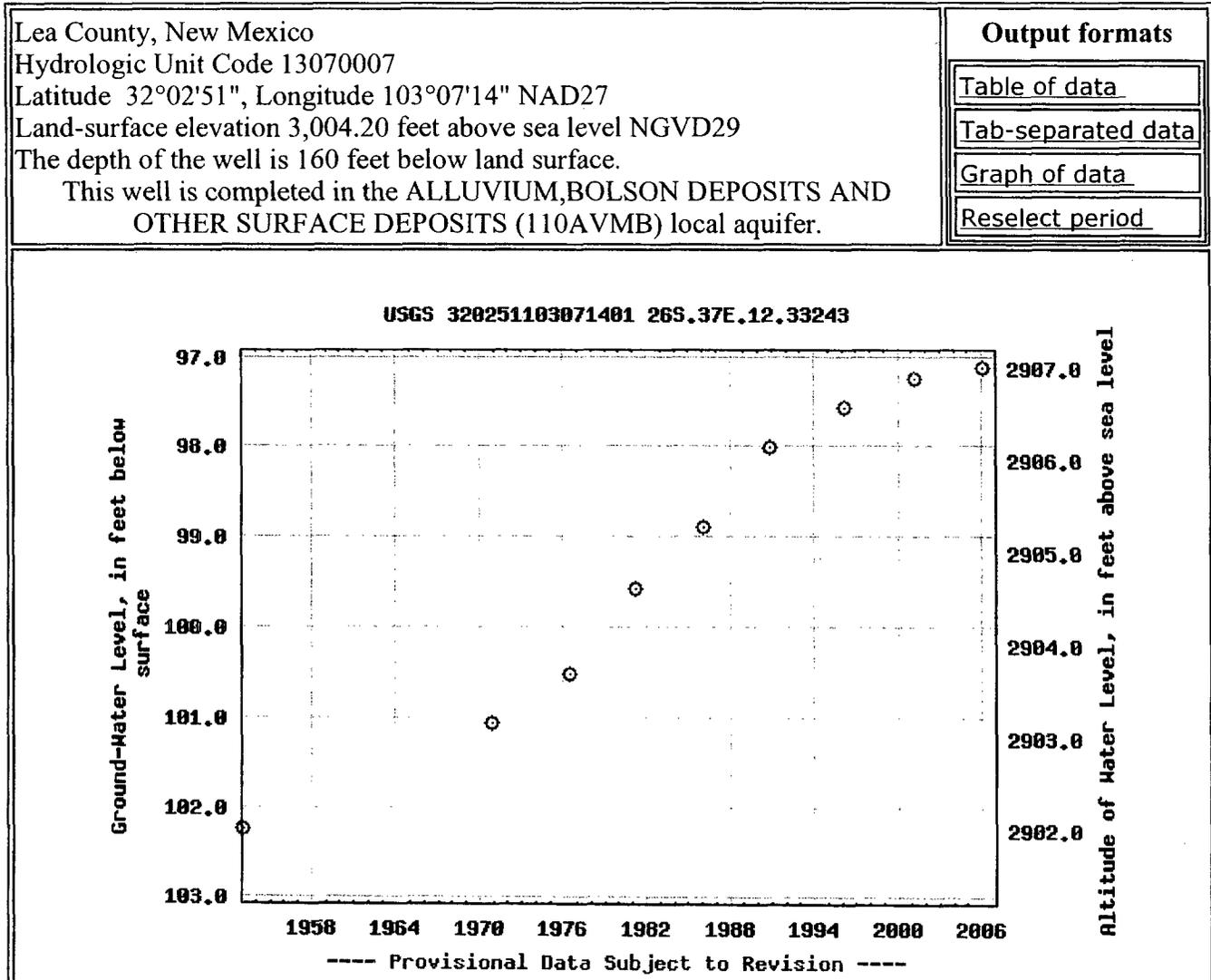
## USGS 320251103071401 26S.37E.12.33243

Available data for this site

Ground-water: Field measurements



GO



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320259103122201

[Save file of selected sites to local disk for future upload](#)

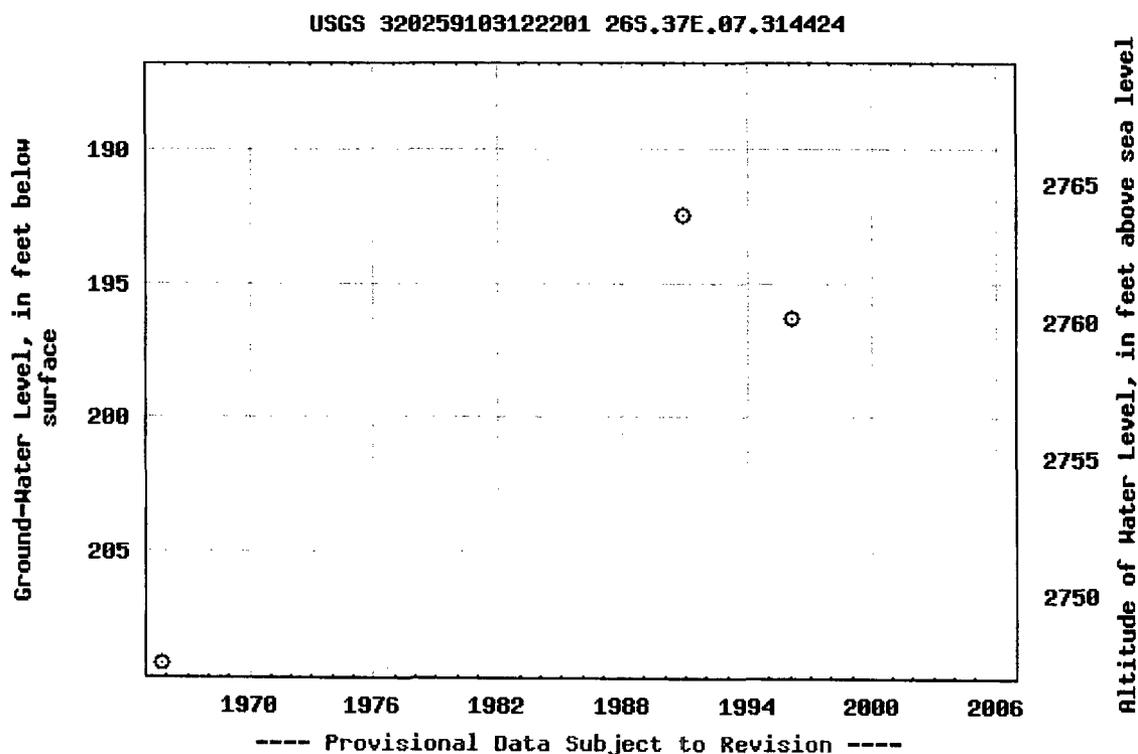
**USGS 320259103122201 26S.37E.07.314424**

Available data for this site Ground-water: Field measurements

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°02'59", Longitude 103°12'22" NAD27  
 Land-surface elevation 2,956.40 feet above sea level NGVD29  
 The depth of the well is 470 feet below land surface.  
 This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

**Output formats**

- 
- 
- 
- 





Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320046103085101

Save file of selected sites to local disk for future upload

USGS 320046103085101 26S.37E.27.23212

Available data for this site

Ground-water: Field measurements

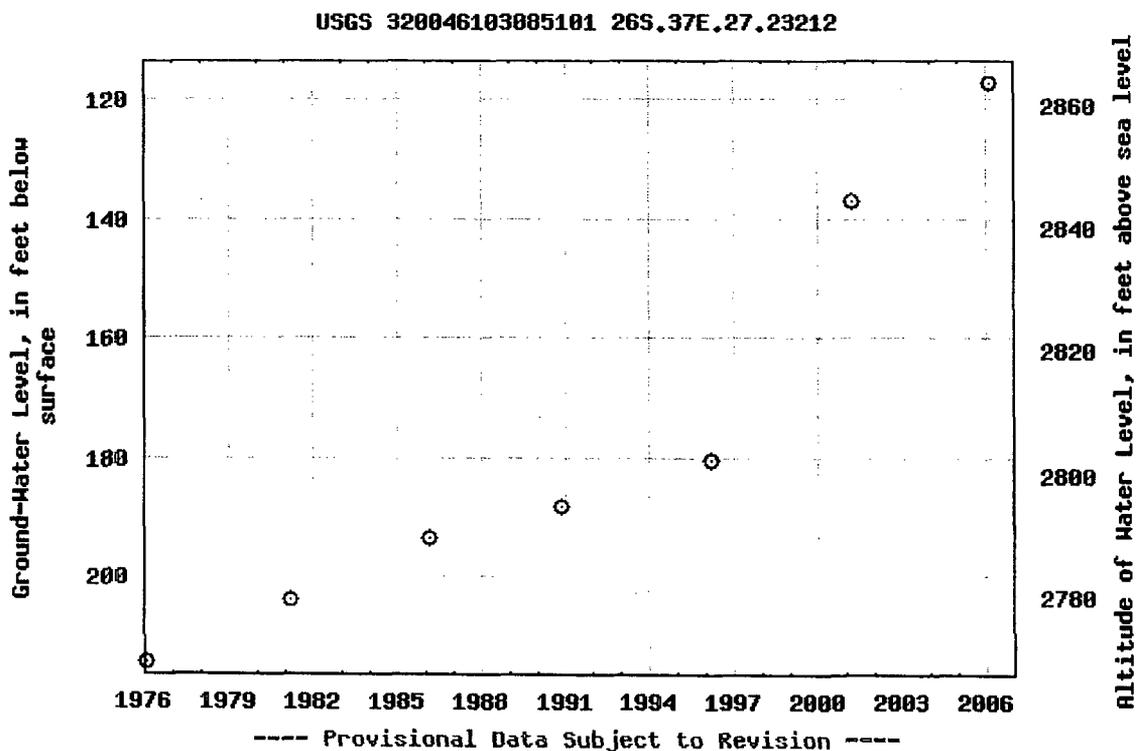


GO

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°00'46", Longitude 103°08'51" NAD27  
 Land-surface elevation 2,982.20 feet above sea level NGVD29  
 The depth of the well is 525 feet below land surface.  
 This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320303103100901

Save file of selected sites to local disk for future upload

**USGS 320303103100901 26S.37E.09.32411A**

Available data for this site

Ground-water: Field measurements



GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°03'03", Longitude 103°10'09" NAD27

Land-surface elevation 2,969.60 feet above sea level NGVD29

The depth of the well is 140 feet below land surface.

This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

**Output formats**

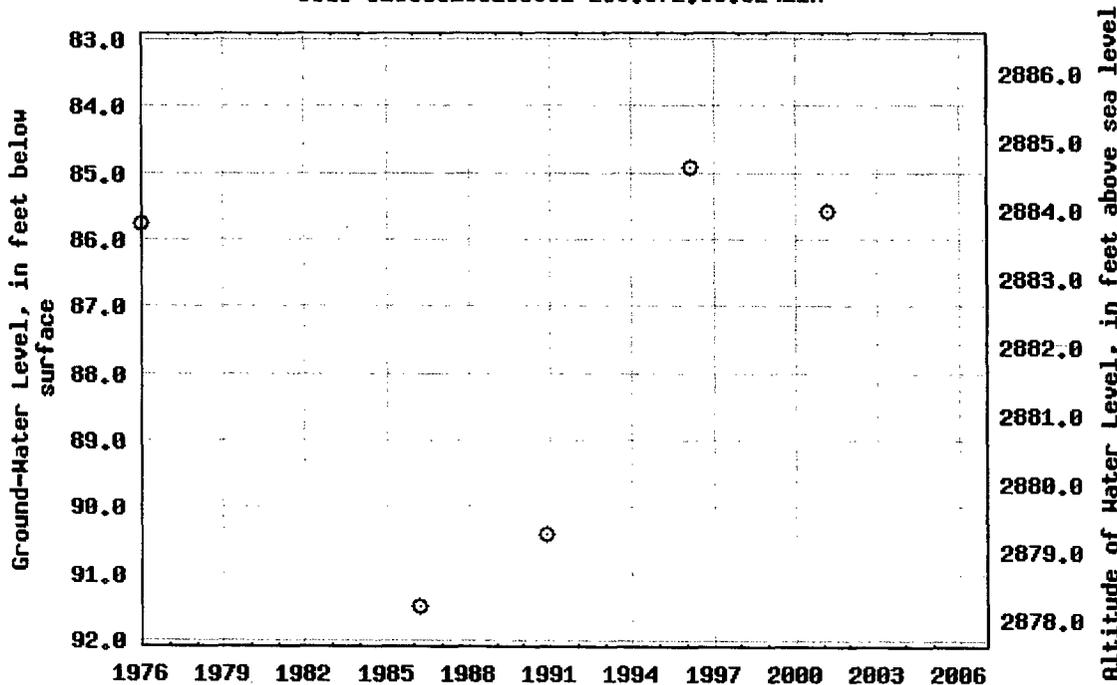
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

**USGS 320303103100901 26S.37E.09.32411A**



---- Provisional Data Subject to Revision ----

Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320401103082901

Save file of selected sites to local disk for future upload

USGS 320401103082901 26S.37E.02.311124

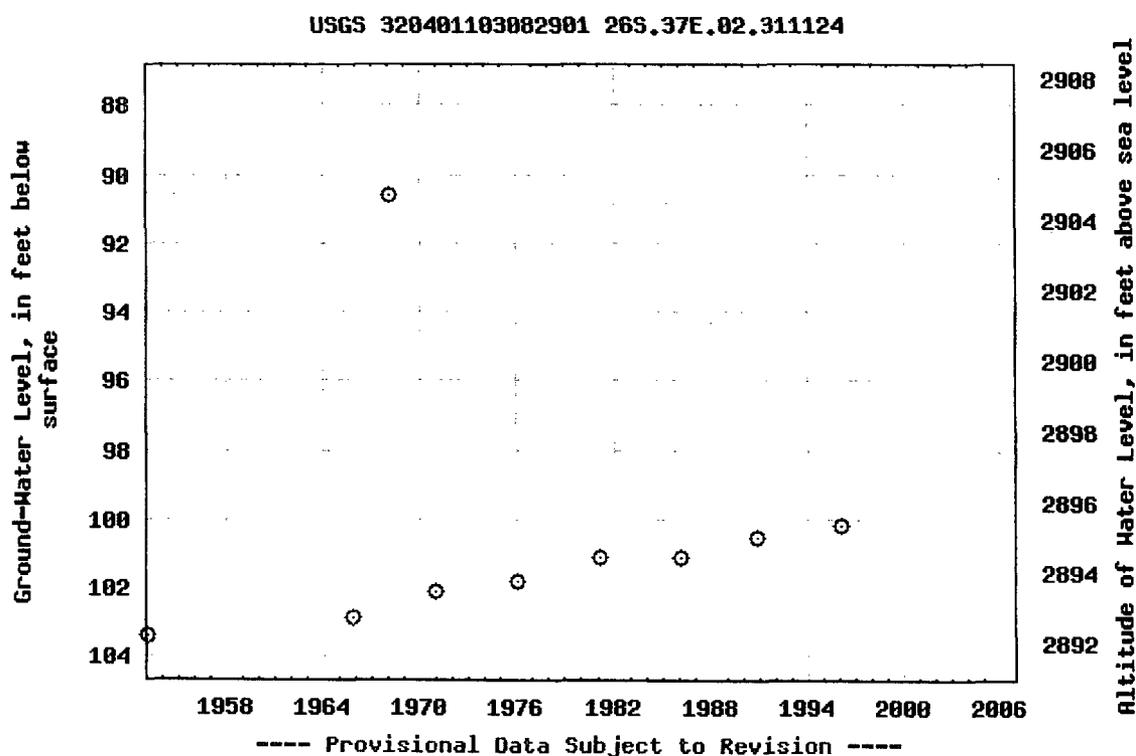
Available data for this site Ground-water: Field measurements

GO

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°04'01", Longitude 103°08'29" NAD27  
 Land-surface elevation 2,995.40 feet above sea level NGVD29  
 The depth of the well is 119 feet below land surface.  
 This well is completed in the ALLUVIUM, BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- [Table of data](#)
- [Tab-separated data](#)
- [Graph of data](#)
- [Reselect period](#)



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320149103134201

Save file of selected sites to local disk for future upload

## USGS 320149103134201 26S.36E.23.222322

Available data for this site

Ground-water: Field measurements



GO

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°01'49", Longitude 103°13'42" NAD27  
 Land-surface elevation 2,925.80 feet above sea level NGVD29  
 The depth of the well is 200 feet below land surface.

This well is completed in the ALLUVIUM, BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

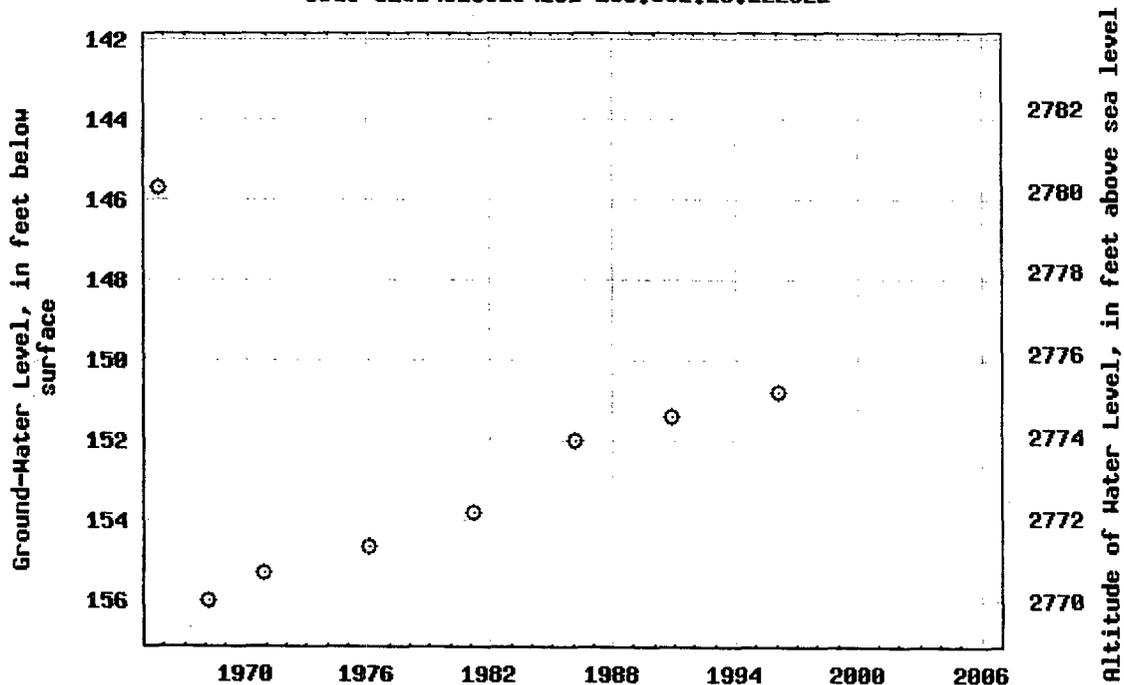
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320149103134201 26S.36E.23.222322



---- Provisional Data Subject to Revision ----



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320251103154201

Save file of selected sites to local disk for future upload

USGS 320251103154201 26S.36E.09.44421B

Available data for this site

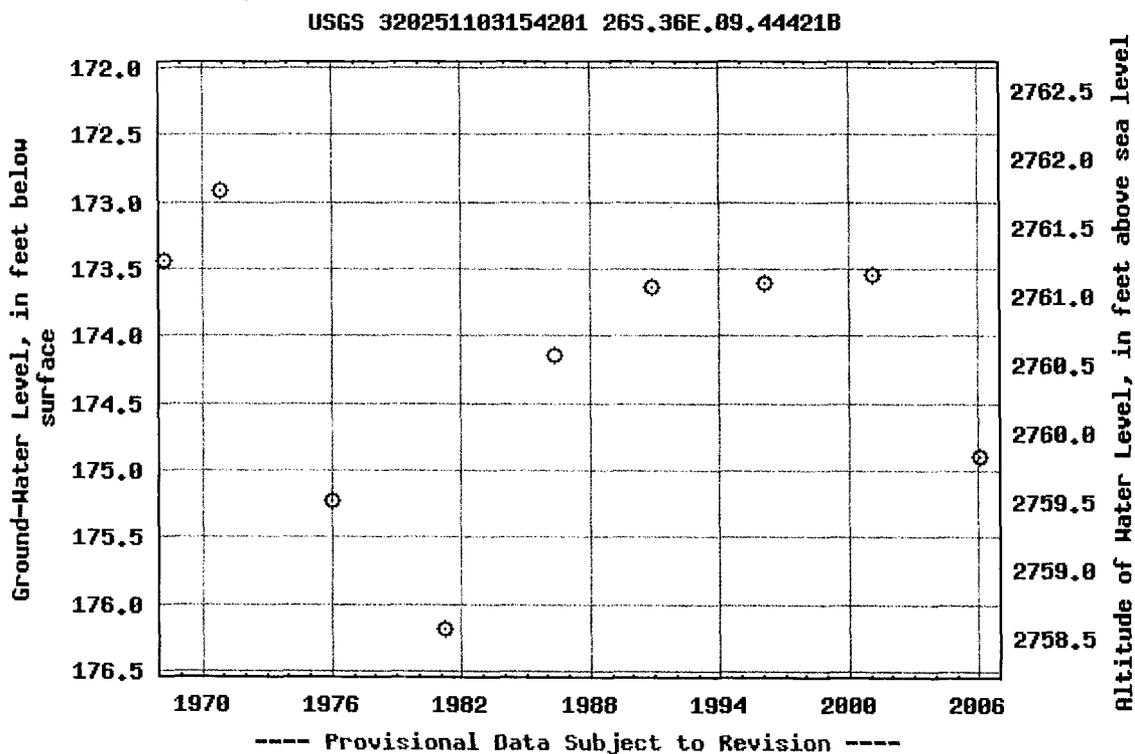
Ground-water: Field measurements

GO

Lea County, New Mexico  
 Hydrologic Unit Code 13070007  
 Latitude 32°02'51", Longitude 103°15'42" NAD27  
 Land-surface elevation 2,934.70 feet above sea level NGVD29  
 The depth of the well is 200 feet below land surface.  
 This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- [Table of data](#)
- [Tab-separated data](#)
- [Graph of data](#)
- [Reselect period](#)



Water Resources

National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 320510103101301

Save file of selected sites to local disk for future upload

USGS 320510103101301 25S.37E.33.11444

Available data for this site

Ground-water: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°05'10", Longitude 103°10'13" NAD27

Land-surface elevation 3,001.70 feet above sea level NGVD29

The depth of the well is 105 feet below land surface.

This well is completed in the ALLUVIUM, BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

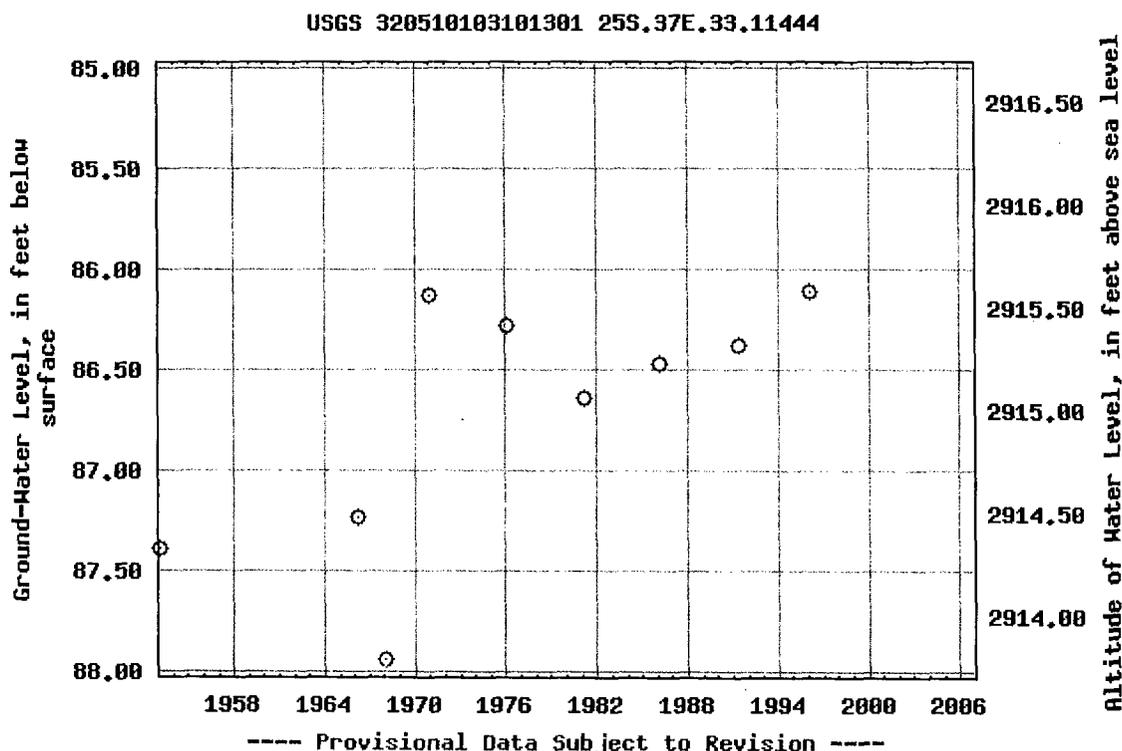
Output formats

Table of data

Tab-separated data

Graph of data

Reselect period



New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 26S Range: 37E Sections:

NAD27 X: Y: Zone:  Search Radius:

County:  Basin:  Number: Suffix:

Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_  Non-Domestic  Domestic  
 All

POD / Surface Data Report  Avg Depth to Water Report

Water Column Report

AVERAGE DEPTH OF WATER REPORT 08/28/2006

Bsn Tws Rng Sec Zone X Y Wells (Depth Water in Feet)  
Min Max Avg

No Records found, try again



New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 26S Range: 36E Sections:

NAD27 X: Y: Zone:  Search Radius:

County:  Basin:  Number: Suffix:

Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_  Non-Domestic  Domestic  
 All

**POD / Surface Data Report**  **Avg Depth to Water Report**

**Water Column Report**

AVERAGE DEPTH OF WATER REPORT 08/28/2006

| Bsn | Tws | Rng | Sec | Zone | X | Y | Wells | (Depth Water in Feet) |     |     |
|-----|-----|-----|-----|------|---|---|-------|-----------------------|-----|-----|
|     |     |     |     |      |   |   |       | Min                   | Max | Avg |

No Records found, try again

New Mexico Office of the State Engineer  
POD Reports and Downloads

Township: 25S Range: 36E Sections:

NAD27 X: Y: Zone:  Search Radius:

County:  Basin:  Number: Suffix:

Owner Name: (First) \_\_\_\_\_ (Last) \_\_\_\_\_  Non-Domestic  Domestic  
 All

POD / Surface Data Report  Avg. Depth to Water Report

Water Column Report

AVERAGE DEPTH OF WATER REPORT 08/28/2006

| Bsn | Tws | Rng | Sec | Zone | X | Y | Wells | Min | Max | Avg |
|-----|-----|-----|-----|------|---|---|-------|-----|-----|-----|
|-----|-----|-----|-----|------|---|---|-------|-----|-----|-----|

(Depth Water in Feet)

No Records found, try again

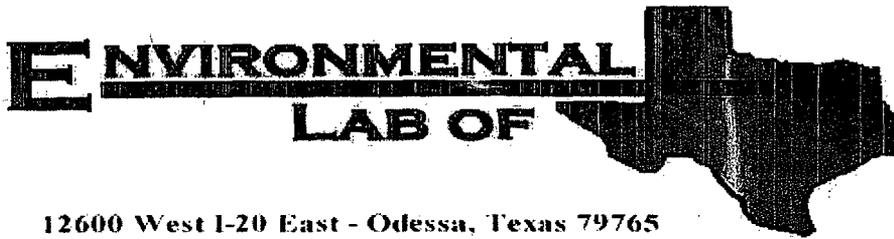
**APPENDIX B**

**Analytical Reports**

**Analytical Report**

**Farnsworth Fed. B #5**

**8/31/2006**



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Ike Tavaraz

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5

Project Number: 2724

Location: Lea Co., NM

Lab Order Number: 6H28009

Report Date: 08/31/06

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**ANALYTICAL REPORT FOR SAMPLES**

| Sample ID   | Laboratory ID | Matrix | Date Sampled   | Date Received    |
|-------------|---------------|--------|----------------|------------------|
| AH-1 0-1'   | 6H28009-01    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-1 1-1.5' | 6H28009-02    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-2 0-1'   | 6H28009-03    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-2 1-1.5' | 6H28009-04    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-3 0-1'   | 6H28009-05    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-3 1-1.5' | 6H28009-06    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-3 2-2.5' | 6H28009-07    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-3 3-3.5' | 6H28009-08    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-4 0-1'   | 6H28009-09    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |
| AH-4 1-1.5' | 6H28009-10    | Solid  | 08/24/06 00:00 | 08-28-2006 15:55 |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                               | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------------------------------|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-1 0-1' (6H28009-01) Solid</b>   |        |                 |           |          |         |          |          |           |       |
| Benzene                               | ND     | 0.0500          | mg/kg dry | 50       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B |       |
| Toluene                               | 0.0590 | 0.0500          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | 0.114  | 0.0500          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | 0.289  | 0.0500          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | 0.113  | 0.0500          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |        | 111 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene       |        | 103 %           | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                  | 205    | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                 | 1270   | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | 178    | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 1650   | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |        | 18.6 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |        | 16.5 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| <b>AH-1 1-1.5' (6H28009-02) Solid</b> |        |                 |           |          |         |          |          |           |       |
| Benzene                               | ND     | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B |       |
| Toluene                               | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |        | 108 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene       |        | 105 %           | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                  | ND     | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                 | 973    | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | 277    | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 1250   | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |        | 19.9 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |        | 15.9 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| <b>AH-2 0-1' (6H28009-03) Solid</b>   |        |                 |           |          |         |          |          |           |       |
| Benzene                               | 0.205  | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                               | 1.58   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | 1.26   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | 3.28   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | 1.46   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |        | 179 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene       |        | 244 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                  | 4810   | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                               | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-2 0-1' (6H28009-03) Solid</b>   |            |                 |           |          |         |          |          |           |       |
| Carbon Ranges C12-C28                 | 18300      | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C28-C35                 | 1550       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 24700      | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |            | 34.4 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |            | 18.3 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| <b>AH-2 1-1.5' (6H28009-04) Solid</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                               | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B |       |
| Toluene                               | J [0.0104] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                          | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | J [0.0218] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (o)                            | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |            | 114 %           |           | 80-120   | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene       |            | 109 %           |           | 80-120   | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                  | J [23.3]   | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M | J     |
| Carbon Ranges C12-C28                 | 466        | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | 155        | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 621        | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |            | 18.2 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |            | 16.5 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| <b>AH-3 0-1' (6H28009-05) Solid</b>   |            |                 |           |          |         |          |          |           |       |
| Benzene                               | 0.113      | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                               | 0.992      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | 0.724      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | 1.92       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | 0.808      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |            | 162 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene       |            | 217 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                  | 1970       | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                 | 6650       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | 665        | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 9280       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |            | 25.4 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |            | 17.6 %          |           | 70-130   | "       | "        | "        | "         | S-06  |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                               | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-3 1-1.5' (6H28009-06) Solid</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                               | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B |       |
| Toluene                               | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |            | 84.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene       |            | 86.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                  | ND         | 10.0            | mg/kg dry | 1        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                 | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | ND         | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |            | 104 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane         |            | 89.0 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>AH-4 0-1' (6H28009-09) Solid</b>   |            |                 |           |          |         |          |          |           |       |
| Benzene                               | 0.225      | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                               | 1.83       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                          | 1.30       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | 3.63       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                            | 1.31       | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |            | 220 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene       |            | 227 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                  | 5960       | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                 | 21100      | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                 | 1670       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 28700      | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |            | 39.2 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |            | 19.1 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| <b>AH-4 1-1.5' (6H28009-10) Solid</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                               | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                               | J [0.0101] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Ethylbenzene                          | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                          | J [0.0222] | 0.0250          | "         | "        | "       | "        | "        | "         | J     |
| Xylene (o)                            | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene     |            | 103 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene       |            | 95.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                  | J [19.5]   | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M | J     |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                               | Result | Reporting<br>Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------------------------------|--------|--------------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-4 1-1.5' (6H28009-10) Solid</b> |        |                    |           |          |         |          |          |           |       |
| Carbon Ranges C12-C28                 | 475    | 50.0               | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C28-C35                 | 129    | 50.0               | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                    | 604    | 50.0               | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane             |        | 16.1 %             |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane         |        | 16.4 %             |           | 70-130   | "       | "        | "        | "         | S-06  |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

| Analyte                               | Result   | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|---------------------------------------|----------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>AH-1 0-1' (6H28009-01) Solid</b>   |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 2540     | 50.0            | mg/kg | 100      | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 2.5      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-1 1-1.5' (6H28009-02) Solid</b> |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 273      | 10.0            | mg/kg | 20       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 3.8      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-2 0-1' (6H28009-03) Solid</b>   |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 6890     | 100             | mg/kg | 200      | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 5.5      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-2 1-1.5' (6H28009-04) Solid</b> |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 406      | 10.0            | mg/kg | 20       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 0.3      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-3 0-1' (6H28009-05) Solid</b>   |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 8510     | 200             | mg/kg | 400      | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 4.0      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-3 1-1.5' (6H28009-06) Solid</b> |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 12100    | 200             | mg/kg | 400      | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 4.6      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-3 2-2.5' (6H28009-07) Solid</b> |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 3200     | 50.0            | mg/kg | 100      | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| <b>AH-3 3-3.5' (6H28009-08) Solid</b> |          |                 |       |          |         |          |          |               |       |
| Chloride                              | J [4.22] | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     | J     |
| <b>AH-4 0-1' (6H28009-09) Solid</b>   |          |                 |       |          |         |          |          |               |       |
| Chloride                              | 1480     | 20.0            | mg/kg | 40       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 3.5      | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

| Analyte                               | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|---------------------------------------|--------|--------------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>AH-4 1-1.5' (6H28009-10) Solid</b> |        |                    |       |          |         |          |          |               |       |
| Chloride                              | 8.34   | 5.00               | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                            | 0.3    | 0.1                | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 7 of 13

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63001 - Solvent Extraction (GC)**

**Blank (EH63001-BLK1)**

Prepared & Analyzed: 08/29/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | ND   | 10.0 | mg/kg wet |      |  |      |        |  |  |  |
| Carbon Ranges C12-C28         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Total Hydrocarbons            | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane     | 45.4 |      | mg/kg     | 50.0 |  | 90.8 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 38.8 |      | "         | 50.0 |  | 77.6 | 70-130 |  |  |  |

**LCS (EH63001-BS1)**

Prepared & Analyzed: 08/29/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 486  | 10.0 | mg/kg wet | 500  |  | 97.2 | 75-125 |  |  |  |
| Carbon Ranges C12-C28         | 441  | 10.0 | "         | 500  |  | 88.2 | 75-125 |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 |  |      | 75-125 |  |  |  |
| Total Hydrocarbons            | 927  | 10.0 | "         | 1000 |  | 92.7 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane     | 50.9 |      | mg/kg     | 50.0 |  | 102  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 37.5 |      | "         | 50.0 |  | 75.0 | 70-130 |  |  |  |

**Calibration Check (EH63001-CCV1)**

Prepared: 08/29/06 Analyzed: 08/30/06

|                               |      |  |       |      |  |      |        |  |  |  |
|-------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 203  |  | mg/kg | 250  |  | 81.2 | 80-120 |  |  |  |
| Carbon Ranges C12-C28         | 246  |  | "     | 250  |  | 98.4 | 80-120 |  |  |  |
| Total Hydrocarbons            | 449  |  | "     | 500  |  | 89.8 | 80-120 |  |  |  |
| Surrogate: 1-Chlorooctane     | 52.2 |  | "     | 50.0 |  | 104  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 44.0 |  | "     | 50.0 |  | 88.0 | 70-130 |  |  |  |

**Matrix Spike (EH63001-MS1)**

Source: 6H28009-06

Prepared: 08/29/06 Analyzed: 08/30/06

|                               |      |      |           |      |    |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|----|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 539  | 10.0 | mg/kg dry | 524  | ND | 103  | 75-125 |  |  |  |
| Carbon Ranges C12-C28         | 489  | 10.0 | "         | 524  | ND | 93.3 | 75-125 |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 | ND |      | 75-125 |  |  |  |
| Total Hydrocarbons            | 1030 | 10.0 | "         | 1050 | ND | 98.1 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane     | 62.2 |      | mg/kg     | 50.0 |    | 124  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 53.4 |      | "         | 50.0 |    | 107  | 70-130 |  |  |  |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 8 of 13

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63001 - Solvent Extraction (GC)**

| Matrix Spike Dup (EH63001-MSD1) | Source: 6H28009-06 |      | Prepared: 08/29/06 |      | Analyzed: 08/30/06 |      |        |       |    |  |
|---------------------------------|--------------------|------|--------------------|------|--------------------|------|--------|-------|----|--|
| Carbon Ranges C6-C12            | 530                | 10.0 | mg/kg dry          | 524  | ND                 | 101  | 75-125 | 1.68  | 20 |  |
| Carbon Ranges C12-C28           | 489                | 10.0 | "                  | 524  | ND                 | 93.3 | 75-125 | 0.00  | 20 |  |
| Carbon Ranges C28-C35           | ND                 | 10.0 | "                  | 0.00 | ND                 |      | 75-125 |       | 20 |  |
| Total Hydrocarbons              | 1020               | 10.0 | "                  | 1050 | ND                 | 97.1 | 75-125 | 0.976 | 20 |  |
| Surrogate: 1-Chlorooctane       | 59.6               |      | mg/kg              | 50.0 |                    | 119  | 70-130 |       |    |  |
| Surrogate: 1-Chlorooctadecane   | 45.7               |      | "                  | 50.0 |                    | 91.4 | 70-130 |       |    |  |

**Batch EH63004 - EPA 5030C (GC)**

| Blank (EH63004-BLK1)              | Prepared & Analyzed: 08/29/06 |                       |
|-----------------------------------|-------------------------------|-----------------------|
| Benzene                           | ND                            | 0.0250 mg/kg wet      |
| Toluene                           | ND                            | 0.0250 "              |
| Ethylbenzene                      | ND                            | 0.0250 "              |
| Xylene (p/m)                      | ND                            | 0.0250 "              |
| Xylene (o)                        | ND                            | 0.0250 "              |
| Surrogate: a,a,a-Trifluorotoluene | 44.0                          | ug/kg 40.0 110 80-120 |
| Surrogate: 4-Bromofluorobenzene   | 36.1                          | " 40.0 90.2 80-120    |

| LCS (EH63004-BS1)                 | Prepared & Analyzed: 08/29/06 |                                  |
|-----------------------------------|-------------------------------|----------------------------------|
| Benzene                           | 1.40                          | 0.0250 mg/kg wet 1.25 112 80-120 |
| Toluene                           | 1.48                          | 0.0250 " 1.25 118 80-120         |
| Ethylbenzene                      | 1.20                          | 0.0250 " 1.25 96.0 80-120        |
| Xylene (p/m)                      | 2.95                          | 0.0250 " 2.50 118 80-120         |
| Xylene (o)                        | 1.35                          | 0.0250 " 1.25 108 80-120         |
| Surrogate: a,a,a-Trifluorotoluene | 47.1                          | ug/kg 40.0 118 80-120            |
| Surrogate: 4-Bromofluorobenzene   | 43.2                          | " 40.0 108 80-120                |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63004 - EPA 5030C (GC)**

**Calibration Check (EH63004-CCV1)**

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |  |       |      |  |      |        |  |  |  |
|-----------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Benzene                           | 46.9 |  | ug/kg | 50.0 |  | 93.8 | 80-120 |  |  |  |
| Toluene                           | 50.9 |  | "     | 50.0 |  | 102  | 80-120 |  |  |  |
| Ethylbenzene                      | 55.2 |  | "     | 50.0 |  | 110  | 80-120 |  |  |  |
| Xylene (p/m)                      | 112  |  | "     | 100  |  | 112  | 80-120 |  |  |  |
| Xylene (o)                        | 54.7 |  | "     | 50.0 |  | 109  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 45.3 |  | "     | 40.0 |  | 113  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 44.8 |  | "     | 40.0 |  | 112  | 80-120 |  |  |  |

**Matrix Spike (EH63004-MS1)**

Source: 6H28010-02

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |        |           |      |    |      |        |  |  |  |
|-----------------------------------|------|--------|-----------|------|----|------|--------|--|--|--|
| Benzene                           | 1.24 | 0.0250 | mg/kg dry | 1.27 | ND | 97.6 | 80-120 |  |  |  |
| Toluene                           | 1.36 | 0.0250 | "         | 1.27 | ND | 107  | 80-120 |  |  |  |
| Ethylbenzene                      | 1.27 | 0.0250 | "         | 1.27 | ND | 100  | 80-120 |  |  |  |
| Xylene (p/m)                      | 2.93 | 0.0250 | "         | 2.54 | ND | 115  | 80-120 |  |  |  |
| Xylene (o)                        | 1.34 | 0.0250 | "         | 1.27 | ND | 106  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 40.5 |        | ug/kg     | 40.0 |    | 101  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 43.9 |        | "         | 40.0 |    | 110  | 80-120 |  |  |  |

**Matrix Spike Dup (EH63004-MSD1)**

Source: 6H28010-02

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |        |           |      |    |      |        |       |    |  |
|-----------------------------------|------|--------|-----------|------|----|------|--------|-------|----|--|
| Benzene                           | 1.17 | 0.0250 | mg/kg dry | 1.27 | ND | 92.1 | 80-120 | 5.80  | 20 |  |
| Toluene                           | 1.29 | 0.0250 | "         | 1.27 | ND | 102  | 80-120 | 4.78  | 20 |  |
| Ethylbenzene                      | 1.25 | 0.0250 | "         | 1.27 | ND | 98.4 | 80-120 | 1.61  | 20 |  |
| Xylene (p/m)                      | 2.74 | 0.0250 | "         | 2.54 | ND | 108  | 80-120 | 6.28  | 20 |  |
| Xylene (o)                        | 1.36 | 0.0250 | "         | 1.27 | ND | 107  | 80-120 | 0.939 | 20 |  |
| Surrogate: a,a,a-Trifluorotoluene | 33.5 |        | ug/kg     | 40.0 |    | 83.8 | 80-120 |       |    |  |
| Surrogate: 4-Bromofluorobenzene   | 37.9 |        | "         | 40.0 |    | 94.8 | 80-120 |       |    |  |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 10 of 13

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EH63005 - General Preparation (Prep)</b>  |        |                 |       |             |               |      |             |      |           |       |
| <b>Blank (EH63005-BLK1)</b> Prepared: 08/29/06 Analyzed: 08/30/06                        |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | ND     | 0.1             | %     |             |               |      |             |      |           |       |
| <b>Duplicate (EH63005-DUP1)</b> Source: 6H28009-01 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 2.1    | 0.1             | %     |             | 2.5           |      |             | 17.4 | 20        |       |
| <b>Duplicate (EH63005-DUP2)</b> Source: 6H28010-17 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 9.5    | 0.1             | %     |             | 9.2           |      |             | 3.21 | 20        |       |
| <b>Duplicate (EH63005-DUP3)</b> Source: 6H29004-03 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 8.8    | 0.1             | %     |             | 7.3           |      |             | 18.6 | 20        |       |
| <b>Batch EH63020 - Water Extraction</b>  |        |                 |       |             |               |      |             |      |           |       |
| <b>Blank (EH63020-BLK1)</b> Prepared & Analyzed: 08/30/06                                |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | ND     | 0.500           | mg/kg |             |               |      |             |      |           |       |
| <b>LCS (EH63020-BS1)</b> Prepared & Analyzed: 08/30/06                                   |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 10.5   | 0.500           | mg/kg | 10.0        |               | 105  | 80-120      |      |           |       |
| <b>Calibration Check (EH63020-CCV1)</b> Prepared & Analyzed: 08/30/06                    |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 9.95   |                 | mg/L  | 10.0        |               | 99.5 | 80-120      |      |           |       |
| <b>Duplicate (EH63020-DUP1)</b> Source: 6H28009-02 Prepared & Analyzed: 08/30/06         |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 247    | 10.0            | mg/kg |             | 273           |      |             | 10.0 | 20        |       |
| <b>Duplicate (EH63020-DUP2)</b> Source: 6H28010-01 Prepared & Analyzed: 08/30/06         |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 371    | 10.0            | mg/kg |             | 429           |      |             | 14.5 | 20        |       |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**

**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63020 - Water Extraction**

**Matrix Spike (EH63020-MS1)**

Source: 6H28009-02

Prepared & Analyzed: 08/30/06

|          |     |      |       |     |     |      |        |  |  |  |
|----------|-----|------|-------|-----|-----|------|--------|--|--|--|
| Chloride | 462 | 10.0 | mg/kg | 200 | 273 | 94.5 | 80-120 |  |  |  |
|----------|-----|------|-------|-----|-----|------|--------|--|--|--|

**Matrix Spike (EH63020-MS2)**

Source: 6H28010-01

Prepared & Analyzed: 08/30/06

|          |     |      |       |     |     |     |        |  |  |  |
|----------|-----|------|-------|-----|-----|-----|--------|--|--|--|
| Chloride | 662 | 10.0 | mg/kg | 200 | 429 | 116 | 80-120 |  |  |  |
|----------|-----|------|-------|-----|-----|-----|--------|--|--|--|

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/ Farnsworth Fed. B #5  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

### Notes and Definitions

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

*Raland K Tuttle*

Date: 8/31/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 13 of 13



**Environmental Lab of Texas**  
 Variance/ Corrective Action Report- Sample Log-In

Client: Highlander Environmental  
 Date/ Time: 08-28-06 @ 1555  
 Lab ID #: 6 H28009  
 Initials: JMM

**Sample Receipt Checklist**

Client Initials

|  | Yes                                 | No |                          | Client Initials |
|--|-------------------------------------|----|--------------------------|-----------------|
| #1 Temperature of container/ cooler?                       | <input checked="" type="checkbox"/> | No | 4.0 °C                   |                 |
| #2 Shipping container in good condition?                   | <input checked="" type="checkbox"/> | No |                          |                 |
| #3 Custody Seals intact on shipping container/ cooler?     | Yes                                 | No | <u>Not Present</u>       |                 |
| #4 Custody Seals intact on sample bottles/ container?      | Yes                                 | No | <u>Not Present</u>       |                 |
| #5 Chain of Custody present?                               | <input checked="" type="checkbox"/> | No |                          |                 |
| #6 Sample instructions complete of Chain of Custody?       | <input checked="" type="checkbox"/> | No |                          |                 |
| #7 Chain of Custody signed when relinquished/ received?    | <input checked="" type="checkbox"/> | No |                          |                 |
| #8 Chain of Custody agrees with sample label(s)?           | <input checked="" type="checkbox"/> | No | ID written on Cont./ Lid |                 |
| #9 Container label(s) legible and intact?                  | <input checked="" type="checkbox"/> | No | Not Applicable           |                 |
| #10 Sample matrix/ properties agree with Chain of Custody? | <input checked="" type="checkbox"/> | No |                          |                 |
| #11 Containers supplied by ELOT?                           | <input checked="" type="checkbox"/> | No |                          |                 |
| #12 Samples in proper container/ bottle?                   | <input checked="" type="checkbox"/> | No | See Below                |                 |
| #13 Samples properly preserved?                            | <input checked="" type="checkbox"/> | No | See Below                |                 |
| #14 Sample bottles intact?                                 | <input checked="" type="checkbox"/> | No |                          |                 |
| #15 Preservations documented on Chain of Custody?          | <input checked="" type="checkbox"/> | No |                          |                 |
| #16 Containers documented on Chain of Custody?             | <input checked="" type="checkbox"/> | No |                          |                 |
| #17 Sufficient sample amount for indicated test(s)?        | <input checked="" type="checkbox"/> | No | See Below                |                 |
| #18 All samples received within sufficient hold time?      | <input checked="" type="checkbox"/> | No | See Below                |                 |
| #19 VOC samples have zero headspace?                       | <input checked="" type="checkbox"/> | No | Not Applicable           |                 |

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

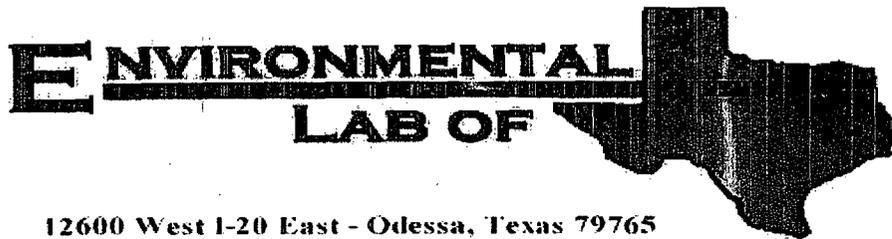
Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

**Analytical Report**

**Farnsworth Fed. B Tank Battery**  
**8/31/2006**



12600 West I-20 East - Odessa, Texas 79765

## Analytical Report

**Prepared for:**

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB

Project Number: 2724

Location: Lea Co., NM

Lab Order Number: 6H28010

Report Date: 08/31/06

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavaréz

Fax: (432) 682-3946

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID   | Laboratory ID | Matrix | Date Sampled   | Date Received    |
|-------------|---------------|--------|----------------|------------------|
| AH-1 0-1'   | 6H28010-01    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-1 1-1.5' | 6H28010-02    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-1 2-2.5' | 6H28010-03    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-1 3-3.5' | 6H28010-04    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-2 0-1'   | 6H28010-05    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-2 1-1.5' | 6H28010-06    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-2 2-2.5' | 6H28010-07    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-2 4-4.5' | 6H28010-08    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-2 5-5.5' | 6H28010-09    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-3 0-1'   | 6H28010-10    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-3 1-1.5' | 6H28010-11    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-3 2-2.5' | 6H28010-12    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-4 0-1'   | 6H28010-13    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-4 1-1.5' | 6H28010-14    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-4 2-2.5' | 6H28010-15    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-5 0-1'   | 6H28010-16    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-5 1-1.5' | 6H28010-17    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |
| AH-5 2-2.5' | 6H28010-18    | Soil   | 08/25/06 00:00 | 08-28-2006 15:55 |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|------------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-1 0-1' (6H28010-01) Soil</b>   |            |                 |           |          |         |          |          |           |       |
| Benzene                              | J [0.0113] | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B | J     |
| Toluene                              | 0.0790     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | 0.0839     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | 0.365      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | 0.103      | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |            | 101 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene      |            | 87.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                 | 379        | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 12300      | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 1910       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 14600      | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |            | 17.8 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |            | 17.1 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| <b>AH-1 1-1.5' (6H28010-02) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Benzene                              | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | ND         | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |            | 99.8 %          | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene      |            | 99.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                 | ND         | 10.0            | mg/kg dry | 1        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 239        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 78.3       | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 317        | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |            | 100 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane        |            | 86.6 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>AH-1 2-2.5' (6H28010-03) Soil</b> |            |                 |           |          |         |          |          |           |       |
| Carbon Ranges C6-C12                 | ND         | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 1040       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 285        | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 1320       | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |            | 17.0 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |            | 16.2 %          | 70-130    |          | "       | "        | "        | "         | S-06  |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 2 of 16

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-2 0-1' (6H28010-05) Soil</b>   |        |                 |           |          |         |          |          |           |       |
| Benzene                              | 0.0435 | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | 0.589  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | 0.371  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | 1.76   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | 0.450  | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |        | 128 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene      |        | 126 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                 | 1590   | 100             | mg/kg dry | 10       | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 19100  | 100             | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 3160   | 100             | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 23800  | 100             | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 10.4 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |        | 9.48 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| <b>AH-2 1-1.5' (6H28010-06) Soil</b> |        |                 |           |          |         |          |          |           |       |
| Carbon Ranges C6-C12                 | 160    | 100             | mg/kg dry | 10       | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 16900  | 100             | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 3400   | 100             | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 20500  | 100             | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 17.5 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |        | 16.9 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| <b>AH-2 2-2.5' (6H28010-07) Soil</b> |        |                 |           |          |         |          |          |           |       |
| Carbon Ranges C6-C12                 | 163    | 100             | mg/kg dry | 10       | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 6330   | 100             | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 1300   | 100             | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 7790   | 100             | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 17.6 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |        | 17.8 %          |           | 70-130   | "       | "        | "        | "         | S-06  |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                                  | Result     | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method     | Notes |
|--|------------|-----------------|-----------|----------|---------|----------|----------|------------|-------|
| <b>AH-2 4-4.5' (6H28010-08) Soil</b>     |            |                 |           |          |         |          |          |            |       |
| Benzene                                  | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B  |       |
| Toluene                                  | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Ethylbenzene                             | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Xylene (p/m)                             | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Xylene (o)                               | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| <i>Surrogate: a,a,a-Trifluorotoluene</i> |            | 105 %           | 80-120    |          | "       | "        | "        | "          |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>   |            | 107 %           | 80-120    |          | "       | "        | "        | "          |       |
| Carbon Ranges C6-C12                     | ND         | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M  |       |
| Carbon Ranges C12-C28                    | 530        | 50.0            | "         | "        | "       | "        | "        | "          |       |
| Carbon Ranges C28-C35                    | 243        | 50.0            | "         | "        | "       | "        | "        | "          |       |
| Total Hydrocarbons                       | 773        | 50.0            | "         | "        | "       | "        | "        | "          |       |
| <i>Surrogate: 1-Chlorooctane</i>         |            | 17.6 %          | 70-130    |          | "       | "        | "        | "          | S-06  |
| <i>Surrogate: 1-Chlorooctadecane</i>     |            | 16.8 %          | 70-130    |          | "       | "        | "        | "          | S-06  |
| <b>AH-3 0-1' (6H28010-10) Soil</b>       |            |                 |           |          |         |          |          |            |       |
| Benzene                                  | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/29/06 | EPA 8021B  |       |
| Toluene                                  | J [0.0177] | 0.0250          | "         | "        | "       | "        | "        | "          | J     |
| Ethylbenzene                             | J [0.0189] | 0.0250          | "         | "        | "       | "        | "        | "          | J     |
| Xylene (p/m)                             | 0.0463     | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Xylene (o)                               | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| <i>Surrogate: a,a,a-Trifluorotoluene</i> |            | 99.5 %          | 80-120    |          | "       | "        | "        | "          |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>   |            | 98.5 %          | 80-120    |          | "       | "        | "        | "          |       |
| Carbon Ranges C6-C12                     | 50.9       | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M  |       |
| Carbon Ranges C12-C28                    | 4220       | 50.0            | "         | "        | "       | "        | "        | "          |       |
| Carbon Ranges C28-C35                    | 1010       | 50.0            | "         | "        | "       | "        | "        | "          |       |
| Total Hydrocarbons                       | 5280       | 50.0            | "         | "        | "       | "        | "        | "          |       |
| <i>Surrogate: 1-Chlorooctane</i>         |            | 17.3 %          | 70-130    |          | "       | "        | "        | "          | S-06  |
| <i>Surrogate: 1-Chlorooctadecane</i>     |            | 16.9 %          | 70-130    |          | "       | "        | "        | "          | S-06  |
| <b>AH-3 1-1.5' (6H28010-11) Soil</b>     |            |                 |           |          |         |          |          |            |       |
| Benzene                                  | ND         | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B  |       |
| Toluene                                  | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Ethylbenzene                             | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Xylene (p/m)                             | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| Xylene (o)                               | ND         | 0.0250          | "         | "        | "       | "        | "        | "          |       |
| <i>Surrogate: a,a,a-Trifluorotoluene</i> |            | 93.5 %          | 80-120    |          | "       | "        | "        | "          |       |
| <i>Surrogate: 4-Bromofluorobenzene</i>   |            | 98.0 %          | 80-120    |          | "       | "        | "        | "          |       |
| Carbon Ranges C6-C12                     | ND         | 10.0            | mg/kg dry | 1        | EH63001 | 08/29/06 | 08/30/06 | EPA 8015M. |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-3 1-1.5' (6H28010-11) Soil</b> |        |                 |           |          |         |          |          |           |       |
| Carbon Ranges C12-C28                | ND     | 10.0            | mg/kg dry | 1        | EH63001 | 08/29/06 | 08/30/06 | EPA 8015M |       |
| Carbon Ranges C28-C35                | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 106 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane        |        | 90.8 %          | 70-130    |          | "       | "        | "        | "         |       |
| <b>AH-4 0-1' (6H28010-13) Soil</b>   |        |                 |           |          |         |          |          |           |       |
| Benzene                              | 0.762  | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | 3.94   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | 2.55   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | 9.05   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | 2.04   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |        | 398 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene      |        | 300 %           | 80-120    |          | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                 | 3540   | 50.0            | mg/kg dry | 5        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 10300  | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 963    | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 14800  | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 30.0 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |        | 18.9 %          | 70-130    |          | "       | "        | "        | "         | S-06  |
| <b>AH-4 1-1.5' (6H28010-14) Soil</b> |        |                 |           |          |         |          |          |           |       |
| Benzene                              | ND     | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |        | 102 %           | 80-120    |          | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene      |        | 89.2 %          | 80-120    |          | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                 | ND     | 10.0            | mg/kg dry | 1        | EH63001 | 08/29/06 | 08/29/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 208    | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 73.0   | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 281    | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 103 %           | 70-130    |          | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane        |        | 89.2 %          | 70-130    |          | "       | "        | "        | "         |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 5 of 16

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units     | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|-----------------|-----------|----------|---------|----------|----------|-----------|-------|
| <b>AH-5 0-1' (6H28010-16) Soil</b>   |        |                 |           |          |         |          |          |           |       |
| Benzene                              | 0.340  | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | 2.09   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | 1.49   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | 3.08   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | 1.17   | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |        | 288 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Surrogate: 4-Bromofluorobenzene      |        | 214 %           |           | 80-120   | "       | "        | "        | "         | S-04  |
| Carbon Ranges C6-C12                 | 560    | 50.0            | mg/kg dry | 5        | EH63002 | 08/29/06 | 08/30/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | 1460   | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | 108    | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | 2130   | 50.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 20.4 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| Surrogate: 1-Chlorooctadecane        |        | 17.7 %          |           | 70-130   | "       | "        | "        | "         | S-06  |
| <b>AH-5 1-1.5' (6H28010-17) Soil</b> |        |                 |           |          |         |          |          |           |       |
| Benzene                              | ND     | 0.0250          | mg/kg dry | 25       | EH63004 | 08/29/06 | 08/30/06 | EPA 8021B |       |
| Toluene                              | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Ethylbenzene                         | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (p/m)                         | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Xylene (o)                           | ND     | 0.0250          | "         | "        | "       | "        | "        | "         |       |
| Surrogate: a,a,a-Trifluorotoluene    |        | 103 %           |           | 80-120   | "       | "        | "        | "         |       |
| Surrogate: 4-Bromofluorobenzene      |        | 106 %           |           | 80-120   | "       | "        | "        | "         |       |
| Carbon Ranges C6-C12                 | ND     | 10.0            | mg/kg dry | 1        | EH63002 | 08/29/06 | 08/30/06 | EPA 8015M |       |
| Carbon Ranges C12-C28                | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Carbon Ranges C28-C35                | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Total Hydrocarbons                   | ND     | 10.0            | "         | "        | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctane            |        | 99.2 %          |           | 70-130   | "       | "        | "        | "         |       |
| Surrogate: 1-Chlorooctadecane        |        | 87.0 %          |           | 70-130   | "       | "        | "        | "         |       |

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavaréz

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>AH-1 0-1' (6H28010-01) Soil</b>   |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 429    | 10.0            | mg/kg | 20       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 4.9    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-1 1-1.5' (6H28010-02) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 62.1   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 1.7    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-1 2-2.5' (6H28010-03) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 39.8   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 2.6    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-1 3-3.5' (6H28010-04) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 43.8   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| <b>AH-2 0-1' (6H28010-05) Soil</b>   |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 408    | 10.0            | mg/kg | 20       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 5.5    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-2 1-1.5' (6H28010-06) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 176    | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 9.9    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-2 2-2.5' (6H28010-07) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 81.9   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 10.8   | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-2 4-4.5' (6H28010-08) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 26.0   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 5.7    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method        | Notes |
|--------------------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| <b>AH-2 5-5.5' (6H28010-09) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 41.0   | 5.00            | mg/kg | 10       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| <b>AH-3 0-1' (6H28010-10) Soil</b>   |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 523    | 10.0            | mg/kg | 20       | EH63020 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 1.5    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-3 1-1.5' (6H28010-11) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 541    | 10.0            | mg/kg | 20       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 2.8    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-3 2-2.5' (6H28010-12) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 508    | 10.0            | mg/kg | 20       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| <b>AH-4 0-1' (6H28010-13) Soil</b>   |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 369    | 10.0            | mg/kg | 20       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 3.4    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-4 1-1.5' (6H28010-14) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 36.3   | 5.00            | mg/kg | 10       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 7.2    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-4 2-2.5' (6H28010-15) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 45.5   | 5.00            | mg/kg | 10       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| <b>AH-5 0-1' (6H28010-16) Soil</b>   |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 244    | 10.0            | mg/kg | 20       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 9.8    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |
| <b>AH-5 1-1.5' (6H28010-17) Soil</b> |        |                 |       |          |         |          |          |               |       |
| Chloride                             | 47.5   | 5.00            | mg/kg | 10       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0     |       |
| % Moisture                           | 9.2    | 0.1             | %     | 1        | EH63005 | 08/29/06 | 08/30/06 | % calculation |       |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods**  
**Environmental Lab of Texas**

| Analyte                              | Result | Reporting<br>Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|--------------------------------------|--------|--------------------|-------|----------|---------|----------|----------|-----------|-------|
| <b>AH-5 2-2.5' (6H28010-18) Soil</b> |        |                    |       |          |         |          |          |           |       |
| Chloride                             | 197    | 10.0               | mg/kg | 20       | EH63021 | 08/30/06 | 08/30/06 | EPA 300.0 |       |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63001 - Solvent Extraction (GC)**

**Blank (EH63001-BLK1)**

Prepared & Analyzed: 08/29/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | ND   | 10.0 | mg/kg wet |      |  |      |        |  |  |  |
| Carbon Ranges C12-C28         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Total Hydrocarbons            | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane     | 45.4 |      | mg/kg     | 50.0 |  | 90.8 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 38.8 |      | "         | 50.0 |  | 77.6 | 70-130 |  |  |  |

**LCS (EH63001-BS1)**

Prepared & Analyzed: 08/29/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 486  | 10.0 | mg/kg wet | 500  |  | 97.2 | 75-125 |  |  |  |
| Carbon Ranges C12-C28         | 441  | 10.0 | "         | 500  |  | 88.2 | 75-125 |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 |  |      | 75-125 |  |  |  |
| Total Hydrocarbons            | 927  | 10.0 | "         | 1000 |  | 92.7 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane     | 50.9 |      | mg/kg     | 50.0 |  | 102  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 37.5 |      | "         | 50.0 |  | 75.0 | 70-130 |  |  |  |

**Calibration Check (EH63001-CCV1)**

Prepared: 08/29/06 Analyzed: 08/30/06

|                               |      |  |       |      |  |      |        |  |  |  |
|-------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 203  |  | mg/kg | 250  |  | 81.2 | 80-120 |  |  |  |
| Carbon Ranges C12-C28         | 246  |  | "     | 250  |  | 98.4 | 80-120 |  |  |  |
| Total Hydrocarbons            | 449  |  | "     | 500  |  | 89.8 | 80-120 |  |  |  |
| Surrogate: 1-Chlorooctane     | 52.2 |  | "     | 50.0 |  | 104  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 44.0 |  | "     | 50.0 |  | 88.0 | 70-130 |  |  |  |

**Matrix Spike (EH63001-MS1)**

Source: 6H28009-06

Prepared: 08/29/06 Analyzed: 08/30/06

|                               |      |      |           |      |    |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|----|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 539  | 10.0 | mg/kg dry | 524  | ND | 103  | 75-125 |  |  |  |
| Carbon Ranges C12-C28         | 489  | 10.0 | "         | 524  | ND | 93.3 | 75-125 |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 | ND |      | 75-125 |  |  |  |
| Total Hydrocarbons            | 1030 | 10.0 | "         | 1050 | ND | 98.1 | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane     | 62.2 |      | mg/kg     | 50.0 |    | 124  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 53.4 |      | "         | 50.0 |    | 107  | 70-130 |  |  |  |

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 10 of 16

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Famsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavaréz

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63001 - Solvent Extraction (GC)**

**Matrix Spike Dup (EH63001-MSD1)**

Source: 6H28009-06

Prepared: 08/29/06

Analyzed: 08/30/06

|                               |      |      |           |      |    |      |        |       |    |  |
|-------------------------------|------|------|-----------|------|----|------|--------|-------|----|--|
| Carbon Ranges C6-C12          | 530  | 10.0 | mg/kg dry | 524  | ND | 101  | 75-125 | 1.68  | 20 |  |
| Carbon Ranges C12-C28         | 489  | 10.0 | "         | 524  | ND | 93.3 | 75-125 | 0.00  | 20 |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 | ND |      | 75-125 |       | 20 |  |
| Total Hydrocarbons            | 1020 | 10.0 | "         | 1050 | ND | 97.1 | 75-125 | 0.976 | 20 |  |
| Surrogate: 1-Chlorooctane     | 59.6 |      | mg/kg     | 50.0 |    | 119  | 70-130 |       |    |  |
| Surrogate: 1-Chlorooctadecane | 45.7 |      | "         | 50.0 |    | 91.4 | 70-130 |       |    |  |

**Batch EH63002 - Solvent Extraction (GC)**

**Blank (EH63002-BLK1)**

Prepared: 08/29/06

Analyzed: 08/30/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | ND   | 10.0 | mg/kg wet |      |  |      |        |  |  |  |
| Carbon Ranges C12-C28         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Total Hydrocarbons            | ND   | 10.0 | "         |      |  |      |        |  |  |  |
| Surrogate: 1-Chlorooctane     | 47.5 |      | mg/kg     | 50.0 |  | 95.0 | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 41.5 |      | "         | 50.0 |  | 83.0 | 70-130 |  |  |  |

**LCS (EH63002-BS1)**

Prepared: 08/29/06

Analyzed: 08/30/06

|                               |      |      |           |      |  |      |        |  |  |  |
|-------------------------------|------|------|-----------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 585  | 10.0 | mg/kg wet | 500  |  | 117  | 75-125 |  |  |  |
| Carbon Ranges C12-C28         | 498  | 10.0 | "         | 500  |  | 99.6 | 75-125 |  |  |  |
| Carbon Ranges C28-C35         | ND   | 10.0 | "         | 0.00 |  |      | 75-125 |  |  |  |
| Total Hydrocarbons            | 1080 | 10.0 | "         | 1000 |  | 108  | 75-125 |  |  |  |
| Surrogate: 1-Chlorooctane     | 59.4 |      | mg/kg     | 50.0 |  | 119  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 49.5 |      | "         | 50.0 |  | 99.0 | 70-130 |  |  |  |

**Calibration Check (EH63002-CCV1)**

Prepared: 08/29/06

Analyzed: 08/30/06

|                               |      |  |       |      |  |      |        |  |  |  |
|-------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Carbon Ranges C6-C12          | 204  |  | mg/kg | 250  |  | 81.6 | 80-120 |  |  |  |
| Carbon Ranges C12-C28         | 215  |  | "     | 250  |  | 86.0 | 80-120 |  |  |  |
| Total Hydrocarbons            | 419  |  | "     | 500  |  | 83.8 | 80-120 |  |  |  |
| Surrogate: 1-Chlorooctane     | 55.3 |  | "     | 50.0 |  | 111  | 70-130 |  |  |  |
| Surrogate: 1-Chlorooctadecane | 45.8 |  | "     | 50.0 |  | 91.6 | 70-130 |  |  |  |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavaréz

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63002 - Solvent Extraction (GC)**

| <b>Matrix Spike (EH63002-MS1)</b> |      | <b>Source: 6H29004-01</b> |           |      | <b>Prepared: 08/29/06</b> |      | <b>Analyzed: 08/30/06</b> |  |
|-----------------------------------|------|---------------------------|-----------|------|---------------------------|------|---------------------------|--|
| Carbon Ranges C6-C12              | 643  | 10.0                      | mg/kg dry | 614  | ND                        | 105  | 75-125                    |  |
| Carbon Ranges C12-C28             | 563  | 10.0                      | "         | 614  | 25.9                      | 87.5 | 75-125                    |  |
| Carbon Ranges C28-C35             | ND   | 10.0                      | "         | 0.00 | 4.53                      |      | 75-125                    |  |
| Total Hydrocarbons                | 1210 | 10.0                      | "         | 1230 | 25.9                      | 96.3 | 75-125                    |  |
| Surrogate: 1-Chlorooctane         | 59.3 |                           | mg/kg     | 50.0 |                           | 119  | 70-130                    |  |
| Surrogate: 1-Chlorooctadecane     | 45.9 |                           | "         | 50.0 |                           | 91.8 | 70-130                    |  |

| <b>Matrix Spike Dup (EH63002-MSD1)</b> |      | <b>Source: 6H29004-01</b> |           |      | <b>Prepared: 08/29/06</b> |      | <b>Analyzed: 08/30/06</b> |          |
|--|------|---------------------------|-----------|------|---------------------------|------|---------------------------|----------|
| Carbon Ranges C6-C12                   | 647  | 10.0                      | mg/kg dry | 614  | ND                        | 105  | 75-125                    | 0.620 20 |
| Carbon Ranges C12-C28                  | 581  | 10.0                      | "         | 614  | 25.9                      | 90.4 | 75-125                    | 3.15 20  |
| Carbon Ranges C28-C35                  | ND   | 10.0                      | "         | 0.00 | 4.53                      |      | 75-125                    | 20       |
| Total Hydrocarbons                     | 1230 | 10.0                      | "         | 1230 | 25.9                      | 97.9 | 75-125                    | 1.64 20  |
| Surrogate: 1-Chlorooctane              | 60.3 |                           | mg/kg     | 50.0 |                           | 121  | 70-130                    |          |
| Surrogate: 1-Chlorooctadecane          | 47.7 |                           | "         | 50.0 |                           | 95.4 | 70-130                    |          |

**Batch EH63004 - EPA 5030C (GC)**

| <b>Blank (EH63004-BLK1)</b>       |      | <b>Prepared &amp; Analyzed: 08/29/06</b> |           |      |  |      |        |  |  |  |
|-----------------------------------|------|--|-----------|------|--|------|--------|--|--|--|
| Benzene                           | ND   | 0.0250                                   | mg/kg wet |      |  |      |        |  |  |  |
| Toluene                           | ND   | 0.0250                                   | "         |      |  |      |        |  |  |  |
| Ethylbenzene                      | ND   | 0.0250                                   | "         |      |  |      |        |  |  |  |
| Xylene (p/m)                      | ND   | 0.0250                                   | "         |      |  |      |        |  |  |  |
| Xylene (o)                        | ND   | 0.0250                                   | "         |      |  |      |        |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 44.0 |  | ug/kg     | 40.0 |  | 110  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 36.1 |  | "         | 40.0 |  | 90.2 | 80-120 |  |  |  |

| <b>LCS (EH63004-BS1)</b>          |      | <b>Prepared &amp; Analyzed: 08/29/06</b> |           |      |  |      |        |  |  |  |
|-----------------------------------|------|--|-----------|------|--|------|--------|--|--|--|
| Benzene                           | 1.40 | 0.0250                                   | mg/kg wet | 1.25 |  | 112  | 80-120 |  |  |  |
| Toluene                           | 1.48 | 0.0250                                   | "         | 1.25 |  | 118  | 80-120 |  |  |  |
| Ethylbenzene                      | 1.20 | 0.0250                                   | "         | 1.25 |  | 96.0 | 80-120 |  |  |  |
| Xylene (p/m)                      | 2.95 | 0.0250                                   | "         | 2.50 |  | 118  | 80-120 |  |  |  |
| Xylene (o)                        | 1.35 | 0.0250                                   | "         | 1.25 |  | 108  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 47.1 |  | ug/kg     | 40.0 |  | 118  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 43.2 |  | "         | 40.0 |  | 108  | 80-120 |  |  |  |

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**Organics by GC - Quality Control**  
**Environmental Lab of Texas**

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

**Batch EH63004 - EPA 5030C (GC)**

**Calibration Check (EH63004-CCV1)**

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |  |       |      |  |      |        |  |  |  |
|-----------------------------------|------|--|-------|------|--|------|--------|--|--|--|
| Benzene                           | 46.9 |  | ug/kg | 50.0 |  | 93.8 | 80-120 |  |  |  |
| Toluene                           | 50.9 |  | "     | 50.0 |  | 102  | 80-120 |  |  |  |
| Ethylbenzene                      | 55.2 |  | "     | 50.0 |  | 110  | 80-120 |  |  |  |
| Xylene (p/m)                      | 112  |  | "     | 100  |  | 112  | 80-120 |  |  |  |
| Xylene (o)                        | 54.7 |  | "     | 50.0 |  | 109  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 45.3 |  | "     | 40.0 |  | 113  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 44.8 |  | "     | 40.0 |  | 112  | 80-120 |  |  |  |

**Matrix Spike (EH63004-MS1)**

Source: 6H28010-02

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |        |           |      |    |      |        |  |  |  |
|-----------------------------------|------|--------|-----------|------|----|------|--------|--|--|--|
| Benzene                           | 1.24 | 0.0250 | mg/kg dry | 1.27 | ND | 97.6 | 80-120 |  |  |  |
| Toluene                           | 1.36 | 0.0250 | "         | 1.27 | ND | 107  | 80-120 |  |  |  |
| Ethylbenzene                      | 1.27 | 0.0250 | "         | 1.27 | ND | 100  | 80-120 |  |  |  |
| Xylene (p/m)                      | 2.93 | 0.0250 | "         | 2.54 | ND | 115  | 80-120 |  |  |  |
| Xylene (o)                        | 1.34 | 0.0250 | "         | 1.27 | ND | 106  | 80-120 |  |  |  |
| Surrogate: a,a,a-Trifluorotoluene | 40.5 |        | ug/kg     | 40.0 |    | 101  | 80-120 |  |  |  |
| Surrogate: 4-Bromofluorobenzene   | 43.9 |        | "         | 40.0 |    | 110  | 80-120 |  |  |  |

**Matrix Spike Dup (EH63004-MSD1)**

Source: 6H28010-02

Prepared: 08/29/06 Analyzed: 08/30/06

|                                   |      |        |           |      |    |      |        |       |    |  |
|-----------------------------------|------|--------|-----------|------|----|------|--------|-------|----|--|
| Benzene                           | 1.17 | 0.0250 | mg/kg dry | 1.27 | ND | 92.1 | 80-120 | 5.80  | 20 |  |
| Toluene                           | 1.29 | 0.0250 | "         | 1.27 | ND | 102  | 80-120 | 4.78  | 20 |  |
| Ethylbenzene                      | 1.25 | 0.0250 | "         | 1.27 | ND | 98.4 | 80-120 | 1.61  | 20 |  |
| Xylene (p/m)                      | 2.74 | 0.0250 | "         | 2.54 | ND | 108  | 80-120 | 6.28  | 20 |  |
| Xylene (o)                        | 1.36 | 0.0250 | "         | 1.27 | ND | 107  | 80-120 | 0.939 | 20 |  |
| Surrogate: a,a,a-Trifluorotoluene | 33.5 |        | ug/kg     | 40.0 |    | 83.8 | 80-120 |       |    |  |
| Surrogate: 4-Bromofluorobenzene   | 37.9 |        | "         | 40.0 |    | 94.8 | 80-120 |       |    |  |

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|------|-----------|-------|
| <b>Batch EH63005 - General Preparation (Prep)</b>  |        |                 |       |             |               |      |             |      |           |       |
| <b>Blank (EH63005-BLK1)</b> Prepared: 08/29/06 Analyzed: 08/30/06                        |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | ND     | 0.1             | %     |             |               |      |             |      |           |       |
| <b>Duplicate (EH63005-DUP1)</b> Source: 6H28009-01 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 2.1    | 0.1             | %     |             | 2.5           |      |             | 17.4 | 20        |       |
| <b>Duplicate (EH63005-DUP2)</b> Source: 6H28010-17 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 9.5    | 0.1             | %     |             | 9.2           |      |             | 3.21 | 20        |       |
| <b>Duplicate (EH63005-DUP3)</b> Source: 6H29004-03 Prepared: 08/29/06 Analyzed: 08/30/06 |        |                 |       |             |               |      |             |      |           |       |
| % Moisture   | 8.8    | 0.1             | %     |             | 7.3           |      |             | 18.6 | 20        |       |
| <b>Batch EH63020 - Water Extraction</b>  |        |                 |       |             |               |      |             |      |           |       |
| <b>Blank (EH63020-BLK1)</b> Prepared & Analyzed: 08/30/06                                |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | ND     | 0.500           | mg/kg |             |               |      |             |      |           |       |
| <b>LCS (EH63020-BS1)</b> Prepared & Analyzed: 08/30/06                                   |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 10.5   | 0.500           | mg/kg | 10.0        |               | 105  | 80-120      |      |           |       |
| <b>Calibration Check (EH63020-CCV1)</b> Prepared & Analyzed: 08/30/06                    |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 9.95   |                 | mg/L  | 10.0        |               | 99.5 | 80-120      |      |           |       |
| <b>Duplicate (EH63020-DUP1)</b> Source: 6H28009-02 Prepared & Analyzed: 08/30/06         |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 247    | 10.0            | mg/kg |             | 273           |      |             | 10.0 | 20        |       |
| <b>Duplicate (EH63020-DUP2)</b> Source: 6H28010-01 Prepared & Analyzed: 08/30/06         |        |                 |       |             |               |      |             |      |           |       |
| Chloride   | 371    | 10.0            | mg/kg |             | 429           |      |             | 14.5 | 20        |       |

Highlander Environmental Corp.  
 1910 N. Big Spring St.  
 Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
 Project Number: 2724  
 Project Manager: Ike Tavarez

Fax: (432) 682-3946

**General Chemistry Parameters by EPA / Standard Methods - Quality Control**  
**Environmental Lab of Texas**

| Analyte                                 | Result | Reporting Limit                          | Units | Spike Level                              | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Notes |
|---|--------|--|-------|--|---------------|------|-------------|------|-----------|-------|
| <b>Batch EH63020 - Water Extraction</b> |        |  |       |  |               |      |             |      |           |       |
| <b>Matrix Spike (EH63020-MS1)</b>       |        | <b>Source: 6H28009-02</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 462    | 10.0                                     | mg/kg | 200                                      | 273           | 94.5 | 80-120      |      |           |       |
| <b>Matrix Spike (EH63020-MS2)</b>       |        | <b>Source: 6H28010-01</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 662    | 10.0                                     | mg/kg | 200                                      | 429           | 116  | 80-120      |      |           |       |
| <b>Batch EH63021 - Water Extraction</b> |        |  |       |  |               |      |             |      |           |       |
| <b>Blank (EH63021-BLK1)</b>             |        | <b>Prepared &amp; Analyzed: 08/30/06</b> |       |  |               |      |             |      |           |       |
| Chloride                                | ND     | 0.500                                    | mg/kg |  |               |      |             |      |           |       |
| <b>LCS (EH63021-BS1)</b>                |        | <b>Prepared &amp; Analyzed: 08/30/06</b> |       |  |               |      |             |      |           |       |
| Chloride                                | 11.0   | 0.500                                    | mg/kg | 10.0                                     |               | 110  | 80-120      |      |           |       |
| <b>Calibration Check (EH63021-CCV1)</b> |        | <b>Prepared &amp; Analyzed: 08/30/06</b> |       |  |               |      |             |      |           |       |
| Chloride                                | 10.1   |  | mg/L  | 10.0                                     |               | 101  | 80-120      |      |           |       |
| <b>Duplicate (EH63021-DUP1)</b>         |        | <b>Source: 6H28010-11</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 553    | 10.0                                     | mg/kg |  | 541           |      |             | 2.19 | 20        |       |
| <b>Duplicate (EH63021-DUP2)</b>         |        | <b>Source: 6H28012-04</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 3.95   | 5.00                                     | mg/kg |  | 4.51          |      |             | 13.2 | 20        | J     |
| <b>Matrix Spike (EH63021-MS1)</b>       |        | <b>Source: 6H28010-11</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 787    | 10.0                                     | mg/kg | 200                                      | 541           | 123  | 80-120      |      |           | S-07  |
| <b>Matrix Spike (EH63021-MS2)</b>       |        | <b>Source: 6H28012-04</b>                |       | <b>Prepared &amp; Analyzed: 08/30/06</b> |               |      |             |      |           |       |
| Chloride                                | 105    | 5.00                                     | mg/kg | 100                                      | 4.51          | 100  | 80-120      |      |           |       |

Highlander Environmental Corp.  
1910 N. Big Spring St.  
Midland TX, 79705

Project: Clayton Williams/SWR/Farnsworth Fed. B TB  
Project Number: 2724  
Project Manager: Ike Tavarez

Fax: (432) 682-3946

### Notes and Definitions

S-07 Recovery outside Laboratory historical or method prescribed limits.

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

*Raland K Tuttle*

Date:

8/31/2006

Raland K. Tuttle, Lab Manager  
Celey D. Keene, Lab Director, Org. Tech Director  
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director  
LaTasha Cornish, Chemist  
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

*The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.*

Page 16 of 16



# Analysis Request and Chain of Custody Record

**HIGHLANDER ENVIRONMENTAL CORP.**  
 1910 N. Big Spring St.  
 Midland, Texas 79705

(432) 682-4559

Fax (432) 682-3946

CLIENT NAME: Southwest Royalty SITE MANAGER: Ike Tavares

PROJECT NO.: 2724 PROJECT NAME: Swire/Facconsworth Fed. & Co. Cu. Mt. TX

SAMPLE IDENTIFICATION

DATE TIME MATRIX COMB GRAB

| LAB I.D. NUMBER | DATE    | TIME | MATRIX | COMB | GRAB | SAMPLE IDENTIFICATION |
|-----------------|---------|------|--------|------|------|-----------------------|
| -11             | 8-25-06 |      | S      |      | X    | AH-3 1-1.5            |
| -12             |         |      | S      |      | X    | AH-3 2-2.5            |
| -13             |         |      | S      |      | X    | AH-4 0-1              |
| -14             |         |      | S      |      | X    | AH-4 1-1.5            |
| -15             |         |      | S      |      | X    | AH-4 2-2.5            |
| -16             |         |      | S      |      | X    | AH-5 0-1              |
| -17             |         |      | S      |      | X    | AH-5 1-1.5            |
| -18             |         |      | S      |      | X    | AH-5 2-2.5            |

PRESERVATIVE METHOD

NUMBER OF CONTAINERS

DATE TIME

HCL

HNO3

ICE

NOVAE

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's 8080/808

PCB's 8080/808

PCB's 8080/808

TCF Volatiles

TCF Semi Volatiles

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

TCF Metals Ag As Ba Cd Cr Pb Hg Se

Gamma Spec.

Alpha Beta (Air)

PLM (Asbestos)

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's 8080/808

PCB's 8080/808

PCB's 8080/808

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

PCB's Vol. 8240/8260/824

PCB's Sem. Vol. 8270/828

PCB's 8080/808

**Environmental Lab of Texas**  
**Variance/ Corrective Action Report- Sample Log-In**

Client: Highlander Env.  
 Date/ Time: 08-28-06 @ ISSS  
 Lab ID #: 6H28010  
 Initials: JMM

**Sample Receipt Checklist**

|     |  |       |    | Client Initials          |
|-----|--|-------|----|--------------------------|
| #1  | Temperature of container/ cooler?                      | (Yes) | No | 4.0 °C                   |
| #2  | Shipping container in good condition?                  | (Yes) | No |                          |
| #3  | Custody Seals intact on shipping container/ cooler?    | Yes   | No | (Not Present)            |
| #4  | Custody Seals intact on sample bottles/ container?     | Yes   | No | (Not Present)            |
| #5  | Chain of Custody present?                              | (Yes) | No |                          |
| #6  | Sample instructions complete of Chain of Custody?      | (Yes) | No |                          |
| #7  | Chain of Custody signed when relinquished/ received?   | (Yes) | No |                          |
| #8  | Chain of Custody agrees with sample label(s)?          | (Yes) | No | ID written on Cont./ Lid |
| #9  | Container label(s) legible and intact?                 | (Yes) | No | Not Applicable           |
| #10 | Sample matrix/ properties agree with Chain of Custody? | (Yes) | No |                          |
| #11 | Containers supplied by ELOT?                           | (Yes) | No |                          |
| #12 | Samples in proper container/ bottle?                   | (Yes) | No | See Below                |
| #13 | Samples properly preserved?                            | (Yes) | No | See Below                |
| #14 | Sample bottles intact?                                 | (Yes) | No |                          |
| #15 | Preservations documented on Chain of Custody?          | (Yes) | No |                          |
| #16 | Containers documented on Chain of Custody?             | (Yes) | No |                          |
| #17 | Sufficient sample amount for indicated test(s)?        | (Yes) | No | See Below                |
| #18 | All samples received within sufficient hold time?      | (Yes) | No | See Below                |
| #19 | VOC samples have zero headspace?                       | (Yes) | No | Not Applicable           |

**Variance Documentation**

Contact: \_\_\_\_\_ Contacted by: \_\_\_\_\_ Date/ Time: \_\_\_\_\_

Regarding: \_\_\_\_\_

Corrective Action Taken: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- Check all that Apply:
- See attached e-mail/ fax
  - Client understands and would like to proceed with analysis
  - Cooling process had begun shortly after sampling event

**APPENDIX C**

**NMOCD Form C-141**

District I XXX  
 1625 N. French Dr., Hobbs, NM 88240  
 District II  
 1301 W. Grand Avenue, Artesia, NM 88210  
 District III  
 1000 Rio Brazos Road, Aztec, NM 87410  
 District IV  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy Minerals and Natural Resources  
 Oil Conservation Division  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-141  
 Revised October 10, 2003

Submit 2 Copies to appropriate  
 District Office in accordance  
 with Rule 116 on back  
 side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

|                 |  |               |                |
|-----------------|--|---------------|----------------|
| Name of Company | SOUTHWEST ROYALTIES, INC.              | Contact       | DAWN M. HOWARD |
| Address         | 6 DESTA DR, ST 2100, MIDLAND, TX 79705 | Telephone No. | 432/688-3267   |
| Facility Name   | FARNSWORTH FEDERAL B #5                | Facility Type | OIL WELL       |

|               |                       |               |  |           |           |
|---------------|-----------------------|---------------|--|-----------|-----------|
| Surface Owner | VARIOUS -SEE ATTACHED | Mineral Owner |  | Lease No. | LC030180B |
|---------------|-----------------------|---------------|--|-----------|-----------|

**LOCATION OF RELEASE**

| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| L           | 7       | 26S      | 37E   | 1980          | S                | 660           | W              | LEA    |

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**NATURE OF RELEASE**

|                             |   |   |                                      |                            |                       |
|-----------------------------|---|---|--------------------------------------|----------------------------|-----------------------|
| Type of Release             | OIL   | Volume of Release                         | Unknown                              | Volume Recovered           | 125 (well)+145 (btry) |
| Source of Release           | Well blow out at well head, tanks overflowed & small leaks in tanks                                       | Date and Hour of Occurrence               | 8/23/06 11:30 A.M. CT                | Date and Hour of Discovery | 8/23/06 11:30 A.M. CT |
| Was Immediate Notice Given? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom?                          | PAT'S VOICEMAIL 505/390-0720 EXT 109 |                            |                       |
| By Whom?                    | DAWN HOWARD   | Date and Hour                             | 8/23/06 11:30 A.M. CT                |                            |                       |
| Was a Watercourse Reached?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                       | If YES, Volume Impacting the Watercourse. |                                      |                            |                       |

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

The well does not produce daily, but builds up enough pressure to flow up the backside. A pocket of gas or an air bubble may have caused the connection to blow off the well at the wellhead. The tanks were also full and overflowed and were found to have small leaks. There were actually two areas of contamination being 1) approximately 2 to 4 acres of over spay from the wellhead and 2) the battery -on the pad, overdrive area and extending into the pasture.

Describe Area Affected and Cleanup Action Taken.\*

The well was brought under control by choke installation. All free standing oil was vacuumed up (125 BF at the well site and 145 BF at the battery). All fluid in tanks drained. Highlander Environmental was contacted and is currently on location assessing damages, taking samples and will be providing their recommended remedial actions. Clean up will strictly adhere to NMOCD Guidelines for Remediation of Leaks, Spills and Releases.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

|   |                         |                                  |                                   |
|---|-------------------------|----------------------------------|-----------------------------------|
| Signature:                                  |                         | <b>OIL CONSERVATION DIVISION</b> |                                   |
| Printed Name: Dawn M. Howard                |                         | Approved by District Supervisor: |                                   |
| Title: Operations Assistant                 | Approval Date:          | Expiration Date:                 |                                   |
| E-mail Address: dhoward@claytonwilliams.com | Conditions of Approval: |                                  | Attached <input type="checkbox"/> |
| Date: 8/24/06                               | Phone: 432/688-3267     |                                  |                                   |

\* Attach Additional Sheets If Necessary

## SITE INFORMATION

### Type of Report: ASSESSMENT AND WORK PLAN

**General Site Information:**

|                               |  |
|-------------------------------|--|
| <b>Site:</b>                  | Farnsworth Federal B #5 and Farnsworth Federal B Tank Battery  |
| <b>Company:</b>               | Southwest Royalties, Inc.  |
| <b>Well Location:</b>         | Section 7, T26S, R37E, Unit Letter L   |
| <b>Tank Battery Location:</b> | Section 7, T26S, R37E, Unit Letter L   |
| <b>Lease Number:</b>          | LC 030180B   |
| <b>County:</b>                | Lea  |
| <b>Spill Area GPS:</b>        | 32.05586, 103.20828  |
| <b>Surface Owner:</b>         | El Paso  |
| <b>Mineral Owner:</b>         | -  |
| <b>Directions:</b>            | At Jal, New Mexico, intersection of 3 Rd. Street and Hwy. 128, go 6.1 miles (south) on 3rd. Street, Turn left (east) into lease road and go 1.5 miles to Y, at Y turn left (south) and go 1.4 miles to tank battery on right side or 1.6 miles to well #5 on left side |

**Release Data:**

|                                 |  |
|---------------------------------|--|
| <b>Date Released:</b>           | 8/23/2006  |
| <b>Type Release:</b>            | oil  |
| <b>Source of Contamination:</b> | well blowout at well #5 and tank battery tank overflowed |
| <b>Fluid Released:</b>          | unknown  |
| <b>Fluids Recovered:</b>        | 125 barrels (well) and 145 barrels (tank battery)        |

**Official Communication:**

|                      |                             |                                |
|----------------------|-----------------------------|--------------------------------|
| <b>Name:</b>         | Dawn M. Howard              | Ike Tavaréz                    |
| <b>Company:</b>      | Southwest Royalties, Inc.   | Highlander Environmental Corp. |
| <b>Address:</b>      | 6 Desta Dr., St 2100        | 1910 N. Big Spring             |
| <b>P.O. Box</b>      |                             |                                |
| <b>City:</b>         | Midland Texas, 79705        | Midland, Texas                 |
| <b>Phone number:</b> | (432) 688-3267              | (432) 682- 4559                |
| <b>Fax:</b>          | (432) 688-3250              | (432) 682- 3946                |
| <b>Email:</b>        | dhoward@claytonwilliams.com | itavarez@hec-enviro.com        |

**Ranking Criteria**

| Depth to Groundwater:                     | Ranking Score | Site Data    |
|---|---------------|--------------|
| <50 ft                                    | 20            |              |
| 50-99 ft                                  | 10            |              |
| >100 ft.                                  | 0             | Greater 100' |
| WellHead Protection:                      | Ranking Score | Site Data    |
| Water Source <1,000 ft., Private <200 ft. | 20            | None         |
| Water Source >1,000 ft., Private >200 ft. | 0             | None         |
| Surface Body of Water:                    | Ranking Score | Site Data    |
| <200 ft.                                  | 20            | None         |
| 200 ft - 1,000 ft.                        | 10            | None         |
| >1,000 ft.                                | 0             | None         |
| <b>Total Ranking Score:</b>               | <b>10</b>     |              |

| Acceptable Soil RRAL (mg/kg) |            |       |
|------------------------------|------------|-------|
| Benzene                      | Total BTEX | TPH   |
| 10                           | 50         | 5,000 |

