

1R - 426-03

Annual GW Mon. REPORTS

DATE:

2005



Infrastructure, buildings, environment, communications

2006 MAR 13 AM 11 47

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Certified Mail Return Receipt # 7002 2410 0001 5812 9619

Subject:

Rice Operating Company Blinbry-Drinkard K-27-1 Junction Box Site,
Eunice, New Mexico
2005 Annual Report Submittal

Date:

09 March 2006

Dear Mr. Price,

Contact:

Sharon Hall

On behalf of Rice Operating Company, ARCADIS G&M, Inc. respectfully submits this 2005 Annual Report for the Blinbry-Drinkard K-27-1 Junction Box Site located in Eunice, New Mexico. The report details the 2005 Annual Report activities and results.

Phone:

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If you have any questions or require additional information please contact me at (432) 687-5400 or Carolyn Haynes at (505) 393-9174.

Email:

shall@arcadis-us.com

Sincerely,

Our ref:

MT000834.0001.00001

ARCADIS G&M, Inc.

Sharon E. Hall

Sharon E. Hall
Site Evaluation Department Manager

Copies:

Kristin Farris Pope - Rice Operating Company, Hobbs, New Mexico
Chris Williams - NMOCD District I Office, Hobbs, New Mexico

Attachment:

Report

Part of a bigger picture

ARCADIS

Sharon E. Hall

Sharon E. Hall
Site Evaluation Department Manager

Blinebry-Drinkard K-27-1
Junction Box Site
2005 Annual Report
RICE Operating Company
Hobbs, New Mexico

Prepared for:
RICE Operating Company

Prepared by:
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Our Ref.:
MT000834.0001.00001

Date:
March 9, 2006

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| | | |
|-----|---------------------------------|---|
| 1. | Introduction | 1 |
| 2. | Site History | 1 |
| 3. | Geology and Hydrogeology | 2 |
| 4. | Investigation Field Activities | 2 |
| 4.1 | Soil Excavation | 3 |
| 4.2 | Sampling of Monitor Well | 4 |
| 5. | Conclusions and Recommendations | 4 |
| 6. | References | 5 |

Tables

- 1 Soil Results
- 2 Groundwater Results

Figures

- 1 Site Location Map
- 2 Extent and Depth of Excavation and Monitor Well Location

Appendices

- A Water Well Survey

1. Introduction

The subject site is a pipeline connection point on the Eunice Monument Eumont (EME) Salt Water Disposal System. The pipeline transports produced water from oil and gas leases to a permitted well for disposal by subsurface injection. The site is located in northeast Eunice, New Mexico approximately 0.15 mile north of the intersection of 6th Street and Avenue Q (Section 27, T21S-R37E, Lea County) (Figure 1).

Laboratory analytical reports for this 2005 Annual Report are in Appendix A and are summarized historically for soil and groundwater in Tables 1 and 2, respectively. This Annual Report details the investigation activities and results and includes recommendations for further action toward closure of the site.

2. Site History

The original junction box was removed and replaced with a new watertight junction box located 30 feet southwest of the original junction box location. Following removal of the junction box, soil was excavated from the site. The excavation measured 30 feet long by 25 feet wide and 16 feet deep.

Soils from the sidewalls and bottom of the excavation were sampled and analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO) and chlorides. Additionally, soil samples were field tested for total petroleum hydrocarbons (TPH) and chlorides. Laboratory and field analytical results are shown in Table 1. The sidewall sample consisted of a 4-point composite sample, and the bottom sample consisted of a 5-point composite sample.

A Junction Box Disclosure Report was completed for this site on July 28, 2003 and submitted to the New Mexico Oil Conservation Division (NMOCD) per the ROC Junction Box Upgrade Workplan. An Investigation Workplan was submitted to the NMOCD on April 1, 2004 and approved on November 18, 2004. The proposed activities from the Investigation Workplan were as follows:

- A one-half mile water well inventory will be performed. The water well inventory will include a review of water well records listed on the New Mexico State Engineer Office and United States Geological Survey (USGS) websites and windmills indicated on applicable USGS topographic maps.

- One soil boring will be installed at the subject site at the former junction box location. Soil samples will be collected at regular intervals no greater than five feet, screened in the field using a photoionization detector (PID) and field tested for chlorides. Soil lithology and the presence of any observed staining or odor will be recorded. One sample, the sample collected at total depth of the boring, will be submitted for laboratory analysis as confirmation of the field sampling.
- If impacts to soil are identified in soil samples collected from the interval at which groundwater is encountered, the soil boring will be converted to a monitoring well. The monitor well will be constructed, developed and sampled in accordance with United States Environmental Protection Agency (EPA) and NMOCD standards. A groundwater sample will be collected and submitted for laboratory analysis for chlorides, BTEX and general chemistry.
- A report that details the investigation activities and results will be submitted to the NMOCD. The report will include recommendations for further action if necessary or for closure of the site.

3. Geology and Hydrogeology

The Ogallala Formation is the principal source of groundwater in the subject area. Depth to groundwater in Lea County ranges from approximately 12 to approximately 300 feet below ground surface (bgs). The Ogallala consists of predominantly coarse fluvial conglomerate and sandstone and fine-grained Eolian siltstone and clay. Where present in the subject area, the Ogallala unconformably overlies Triassic redbeds. The regional groundwater gradient is to the east/southeast.

Depth to groundwater at the subject site is approximately 35 ft. bgs. Groundwater elevations measured in monitor well MW-1 at the subject site are shown in Table 2.

4. Investigation Field Activities

A field survey to identify any water wells in the area in addition to a one-half mile water well inventory was conducted. The water well locations are shown in Figure 1. A water well survey and physical setting survey was prepared by Environmental Data Resources Inc. (EDR). The report is included as Appendix A. Two water wells were identified within one-half mile of the site. No public water supplies were identified within one-half mile. One of the water wells is upgradient of the site based on regional

gradient. The other water well may be downgradient of the site based on regional gradient.

One monitor well MW-1 was installed at the subject site at the former junction box location. Because impacts to soil were identified in soil samples collected from the interval at which groundwater was encountered, the soil boring was converted to a monitor well. The location of MW-1 is shown on Figure 2.

MW-1 was drilled to a total depth of 40 ft bgs and was completed with 4-inch casing to 39 ft bgs. During the installation of MW-1, soil samples were collected at five-foot intervals, screened in the field using a PID and field tested for chlorides. The PID readings for MW-1 ranged from 1.2 to 4.2, and the chloride field tests ranged from 217 to 1,949 milligrams per kilogram (mg/kg). One sample collected from 25 to 30 feet bgs was submitted to a laboratory for analysis as confirmation of the field sampling. The chloride concentration of the laboratory-analyzed sample result (1,360 mg/kg) is comparable to the field testing result (986 mg/kg) at the 27.5 to 28 feet bgs interval. Results of the laboratory soil sampling and field screening/testing are included in Table 1.

4.1 Soil Excavation

Junction box excavation activities were performed at the site between May 22 and June 2, 2003. Soil samples were collected to determine the extent of impacted soils. Chloride and total petroleum hydrocarbon (TPH) field tests were conducted consistently as the area was excavated. TPH concentrations were well below NMOCD guidelines and chloride impact did not exhibit a decline with depth. Confirmation laboratory sample results and field readings are shown in Table 1. Soil in this area was excavated at 30 feet x 25 feet to a depth of 16 ft bgs. The area of excavation is shown on Figure 2.

Based on the results of the soil sampling analytical results, elevated chloride concentrations are present at the subject site. Excavated soils were remediated by blending with overburden/replacement soils and returned to the excavation as backfill to a depth 3 ft bgs, and a 20-mil poly liner was installed in a convex manner above the backfilled, remediated soil. From 3 ft bgs to surface, clean imported soil was backfilled and contoured above the liner. Following excavation, the site was graded to prevent ponding of water and seeded with a blend of native vegetation.

4.2 Sampling of Monitor Well

MW-1 was constructed, developed and sampled in accordance with EPA and NMOCD standards. Groundwater samples were collected from MW-1 on July 15, September 6 and October 17, 2005 and submitted for laboratory analysis for BTEX, chlorides and general chemistry using EPA Methods 8021B, 300.0 and 160.1. Depth to water was measured from top of casing. Results of the laboratory groundwater sampling and depth to water are included in Table 2.

Naturally-occurring inorganic analytes (chlorides, total dissolved solids [TDS] and sulfate) were detected in groundwater samples collected from MW-1.

Chloride concentrations in groundwater were detected above the New Mexico Water Quality Control Commission (WQCC) standard of 250 milligrams per liter (mg/L) in MW-1 for all 2005 sampling events. Chloride concentrations for MW-1 were 975, 885 and 1,280 mg/L on July 15, September 6 and October 17, 2005, respectively.

TDS concentrations in groundwater were detected above the WQCC standard of 1,000 mg/L in MW-1 for all 2005 sampling events. TDS concentrations for MW-1 were 2,800, 2,850 and 3,390 mg/L on July 15, September 6 and October 17, 2005, respectively.

Sulfate concentrations in groundwater were detected above the WQCC standard of 600 mg/L in MW-1 for the June and October 2005 sampling events and below for the September 2005 sampling event. Sulfate concentrations for MW-1 were 624, 460 and 619 mg/L on July 15, September 6 and October 17, 2005, respectively.

BTEX was not detected in MW-1 during 2005 groundwater sampling events.

5. Conclusions and Recommendations

Soils in the immediate area have been excavated and a poly liner installed as described in this report. Backfill material (blended soils) concentrations did not exceed TPH, BTEX and benzene concentrations of 100 mg/kg, 50 mg/kg and 10 mg/kg, respectively. The site has been graded to prevent ponding of rainwater and seeded with a blend of native vegetation.

The groundwater samples were analyzed for hydrocarbons (BTEX) and general water quality. BTEX was not detected in groundwater from MW-1 during the 2005 sampling

events. Chloride, TDS and sulfate were detected at concentrations in excess of WQCC standards in MW-1. Based on the sample results, the recommended sampling frequency is quarterly. Groundwater sampling will be discontinued when a total of eight quarters of sample results indicate that chloride concentrations are below WQCC Title 20, Chapter 6, Part 2 standards.

Because analytical results indicate that chloride concentrations exceed WQCC standards, installation of additional monitoring wells may be warranted.

6. References

Groundwater Handbook, United States Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information; 1992.

Hydrology and Hydrochemistry of the Ogallala Aquifer, Southern High Plains, Texas Panhandle and Eastern New Mexico; Report Number 177; Bureau of Economic Geology; 1988.

Hydrogeochemistry and Water Resources of the Lower Dockum Group in the Texas Panhandle and Eastern New Mexico; Report Number 161; Bureau of Economic Geology; 1986.

New Mexico Water Quality Control Commission, Title 20 Chapter 6, Part 2, Subpart I.

Junction K-27-1, Junction Box Disclosure Report; RICE Operating Company; July 28, 2003.

Junction K-27-1, Investigation Plan; ARCADIS G&M, Inc.; April 1, 2004.

Table 1

Soil Results

Blinebry-Drinkard K-27-1 Junction Box Site, RICE Operating Company, Eunice, New Mexico

| Date | Lab Number | Comment | Laboratory and Field Results (milligrams per kilogram) | | | | | | | | |
|---------|------------|-----------------------------|--|---------|--------------|---------------|---------|---------|--------|-----------|----------|
| | | | Benzene | Toluene | Ethylbenzene | Total Xylenes | Lab GRO | Lab DRO | Lab CI | Field TPH | Field CI |
| 5/22/03 | | vertical @ 4' | | | | | | | | 9,900 | 850 |
| 5/22/03 | | vertical @ 6' | | | | | | | | | |
| 5/22/03 | | vertical @ 8' | | | | | | | | | 2,950 |
| 5/22/03 | | vertical @ 10' | | | | | | | | 11,400 | 3,900 |
| 5/22/03 | | vertical @ 12' | | | | | | | | 157 | 4,900 |
| 5/22/03 | | vertical @ 14' | | | | | | | | | 3,200 |
| 5/22/03 | | 5' N @ 10' | | | | | | | | 85 | 3,200 |
| 5/22/03 | | 5' S @ 10' | | | | | | | | | 2,700 |
| 5/22/03 | | 5' E @ 10' | | | | | | | | | 5,150 |
| 5/22/03 | | 5' W @ 10' | | | | | | | | | 5,250 |
| 5/23/03 | | vertical @ 16' | | | | | | | | | 3,900 |
| 5/23/03 | | 10' E @ 12' | | | | | | | | | 4,500 |
| 5/23/03 | | 10' W @ 12' | | | | | | | | | 3,350 |
| 5/23/03 | | 10' NE @ 12' | | | | | | | | | 2,450 |
| 5/23/03 | | 10' SE @ 12' | | | | | | | | | 4,250 |
| 5/29/03 | | 15' N @ 12' | | | | | | | | | 3,150 |
| 5/29/03 | | 15' S @ 12' | | | | | | | | | 3,700 |
| 5/29/03 | | 15' W @ 12' | | | | | | | | | 1,700 |
| 5/29/03 | | 12' W @ 1' | | | | | | | | | 100 |
| 6/2/03 | | 15' N wall composite | | | | | | | | 37 | 2,600 |
| 6/2/03 | | 15' S wall composite | | | | | | | | 45 | 2,250 |
| 6/2/03 | | 15' E wall composite | | | | | | | | 29 | 1,900 |
| 6/2/03 | | 15' W wall composite | | | | | | | | 38 | 2,950 |
| 6/2/03 | 0306620-02 | wall composite | <0.025 | <0.025 | <0.025 | <0.025 | <10 | <10 | 3,190 | 40 | 2,550 |
| 6/2/03 | 0306620-01 | 5 pt bottom composite @ 16' | <0.025 | <0.025 | <0.025 | <0.025 | <10 | <10 | 3,970 | 32 | 3,150 |
| 6/2/03 | | backfill composite | | | | | | | | | 1,900 |
| 5/10/05 | | MW-1 @ 2.5'-3' | | | | | | | | 1.2 | 217 |
| 5/10/05 | | MW-1 @ 7.5'-8' | | | | | | | | 1.7 | 877 |
| 5/10/05 | | MW-1 @ 12.5'-13' | | | | | | | | 1.2 | 565 |
| 5/10/05 | | MW-1 @ 17.5'-18' | | | | | | | | 2.2 | 1,949 |
| 5/10/05 | | MW-1 @ 22.5'-23' | | | | | | | | 3.2 | 1,413 |

Table 1
Soil Results
Blinebry-Drinkard K-27-1 Junction Box Site, RICE Operating Company, Eunice, New Mexico

| Date | Lab Number | Comment | Laboratory and Field Results (milligrams per kilogram) | | | | | | | | |
|---------|------------|------------------|--|---------|--------------|---------------|---------|---------|--------|-----------|----------|
| | | | Benzene | Toluene | Ethylbenzene | Total Xylenes | Lab GRO | Lab DRO | Lab CI | Field TPH | Field CI |
| 5/10/05 | 5E11007-01 | MW-1 @ 25'-30' | <0.025 | <0.025 | <0.025 | <10 | <10 | 1,360 | | | |
| 5/10/05 | | MW-1 @ 27.5'-28' | | | | | | | 3.7 | 986 | |
| 5/10/05 | | MW-1 @ 32.5'-33' | | | | | | | 4.2 | 488 | |
| 5/10/05 | | MW-1 @ 37.5'-38' | | | | | | | 3.7 | 328 | |

BD Jct. K-27-1

Unit 'K', Section 27, T21S, R37E

4-inch well installed 5/9/05

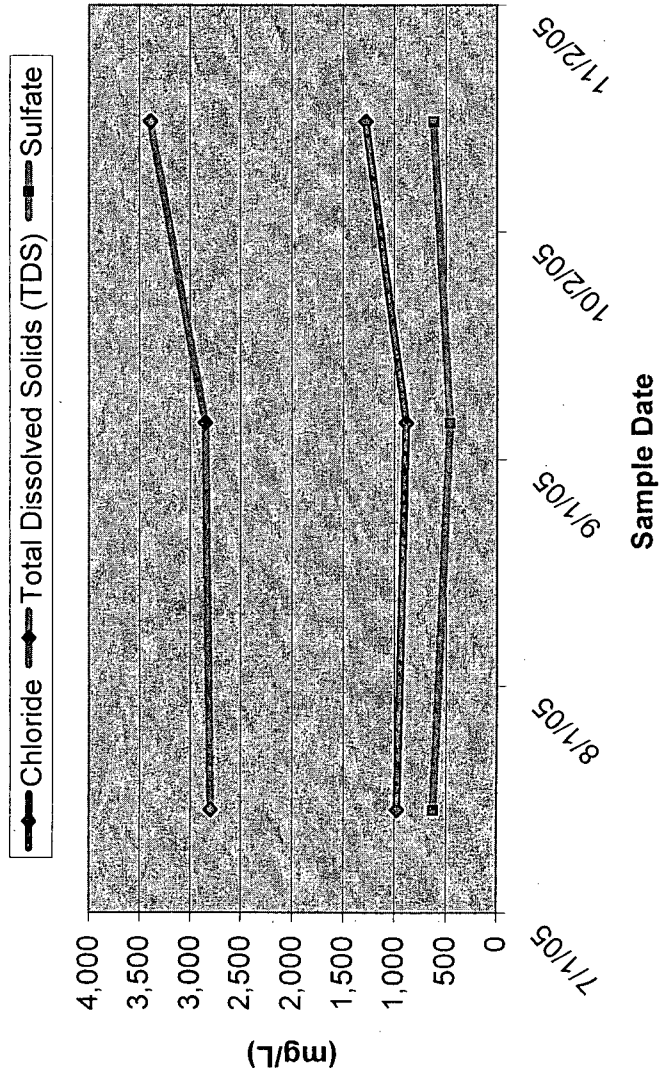
Table 2
Groundwater Results
Blinebry-Drinkard K-27-1 Junction Box Site, RICE Operating Company, Eunice, New Mexico

(ft)

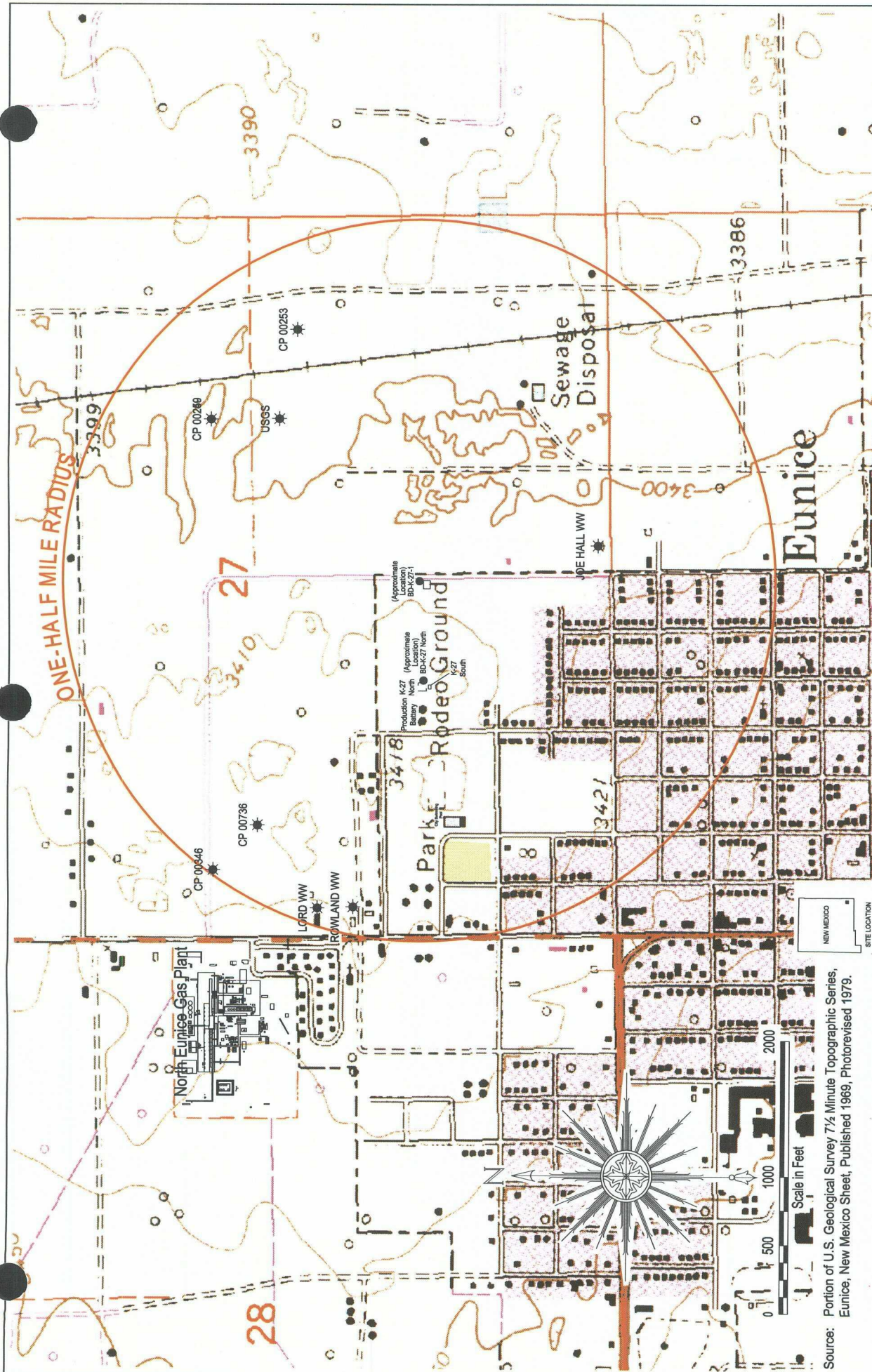
All concentrations are in mg/L

| Well Name | Depth to Water * | Total Depth | Sample Date | Benzene | Toluene | Ethylbenzene | Total Xylenes | Cl ⁻ | TDS | Sulfate | Comments |
|-----------|------------------|-------------|-------------|---------|---------|--------------|---------------|-----------------|-------|---------|---------------|
| MW-1 | 34.50 | 44.00 | 7/15/05 | <0.001 | <0.001 | <0.001 | <0.001 | 975 | 2,800 | 624 | tan and silty |
| | 35.28 | 44.00 | 9/6/05 | <0.001 | <0.001 | <0.001 | <0.001 | 885 | 2,850 | 460 | |
| | 35.14 | 44.00 | 10/17/05 | <0.001 | <0.001 | <0.001 | <0.001 | 1,280 | 3,390 | 619 | |

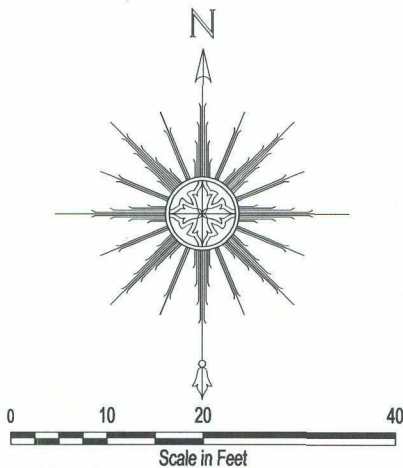
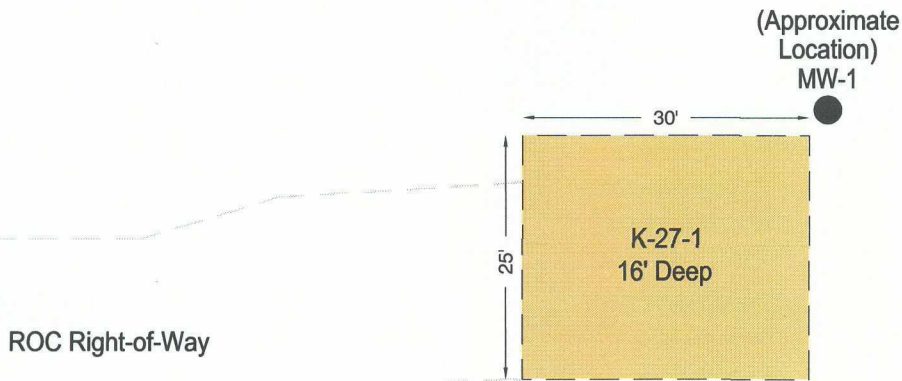
BD Jct. K-27-1 Monitor Well MW-1



* Depth to water measured from top of casing.



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-------------------------------------|--|--|--|--|--|-------------------------------------|--|--|--|-------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|--------------------|--|----------------|--|-------------------|--|--------------------------|--|------------------------|--|-------------------------------|--|-----------------------------|--|---|--|--------------|--|---------------|--|-------------------------------|--|--------------------------|--|--|--|-------------------------------|--|---|--|--|--|---------------------|--|
| <p>Area Manager A. Schmidt</p> <p>Project Manager S. Hall</p> <p>Task Manager K. Lowrie</p> <p>Technical Review K. Lowrie</p> | | <p>© 2006 ARCADIS G&M, Inc.</p> | | <p>Source: Portion of U.S. Geological Survey 7 1/2 Minute Topographic Series, Eunice, New Mexico Sheet, Published 1969, Photorevised 1979.</p> | | <p>Scale in Feet 0 500 1000 2000</p> | | <p>NEW MEXICO SITE LOCATION</p> | | <p>Production K-27 (Approximate Location) BD-K-27 North Production K-27 (Approximate Location) BD-K-27 South</p> | | <p>USGS</p> | | <p>CP 00249</p> | | <p>CP 00253</p> | | <p>CP 00736</p> | | <p>CP 00846</p> | | <p>JOE HALL WW</p> | | <p>LORD WW</p> | | <p>ROWLAND WW</p> | | <p>Park Rodeo Ground</p> | | <p>Sewage Disposal</p> | | <p>North Eunice Gas Plant</p> | | <p>ONE-HALF MILE RADIUS</p> | | <p>3399 3390 3400 3410 3420 3430 3440 3450 3460 3470 3480 3490 3500</p> | | <p>27 28</p> | | <p>Eunice</p> | | <p>Lea County, New Mexico</p> | | <p>Site Location Map</p> | | <p>Blinberry-Drinkard K-27-1 Junction Box Site</p> | | <p>Rice Operating Company</p> | | <p>Project Number MT000834.0001</p> | | <p>Drawing Date 15 February 2006</p> | | <p>Figure 1</p> | |
|---|--|-------------------------------------|--|--|--|--|--|-------------------------------------|--|--|--|-------------|--|-----------------|--|-----------------|--|-----------------|--|-----------------|--|--------------------|--|----------------|--|-------------------|--|--------------------------|--|------------------------|--|-------------------------------|--|-----------------------------|--|---|--|--------------|--|---------------|--|-------------------------------|--|--------------------------|--|--|--|-------------------------------|--|---|--|--|--|---------------------|--|



Source: Portion of U.S. Geological Survey 7½ Minute Topographic Series, Eunice, New Mexico Sheet, Published 1969, Photorevised 1979.



| | |
|------------------|------------|
| Area Manager | A. Schmidt |
| Project Manager | S. Hall |
| Task Manager | K. Lowrie |
| Technical Review | K. Lowrie |



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Rice Operating Company
Blaineby-Drinkard K-27-1 Junction Box Site

Extent and Depth of Excavation
and Monitor Well Location

Lea County, New Mexico

| | |
|----------------|---------------|
| Project Number | MT000834.0001 |
|----------------|---------------|

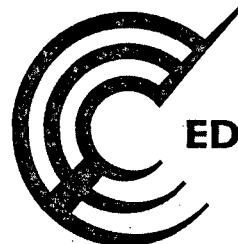
| | |
|--------------|------------------|
| Drawing Date | 15 February 2006 |
|--------------|------------------|

| | |
|--------|---|
| Figure | 2 |
|--------|---|

ARCADIS

Appendix A

Water Well Survey



EDR® Environmental
Data Resources Inc

The EDR GeoCheck® Report

**Rice Operating Junction Box
Avenue Q
Eunice, NM 88231**

Inquiry Number: 1613105.1s

February 13, 2006

The Standard in Environmental Risk Management Information

**440 Wheelers Farms Road
Milford, Connecticut 06461**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com**

TABLE OF CONTENTS

SECTION

PAGE

GEOCHECK ADDENDUM

| | |
|--|-------|
| Physical Setting Source Addendum | A-1 |
| Physical Setting Source Summary | A-2 |
| Physical Setting Source Map | A-10 |
| Physical Setting Source Map Findings | A-11 |
| Physical Setting Source Records Searched | A-131 |

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

RICE OPERATING JUNCTION BOX
AVENUE Q
EUNICE, NM 88231

TARGET PROPERTY COORDINATES

| | |
|--------------------------------|--------------------------|
| Latitude (North): | 32.44650 - 32° 26' 47.4" |
| Longitude (West): | 103.1522 - 103° 9' 7.9" |
| Universal Transverse Mercator: | Zone 13 |
| UTM X (Meters): | 673700.1 |
| UTM Y (Meters): | 3591242.5 |
| Elevation: | 3413 ft. above sea level |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

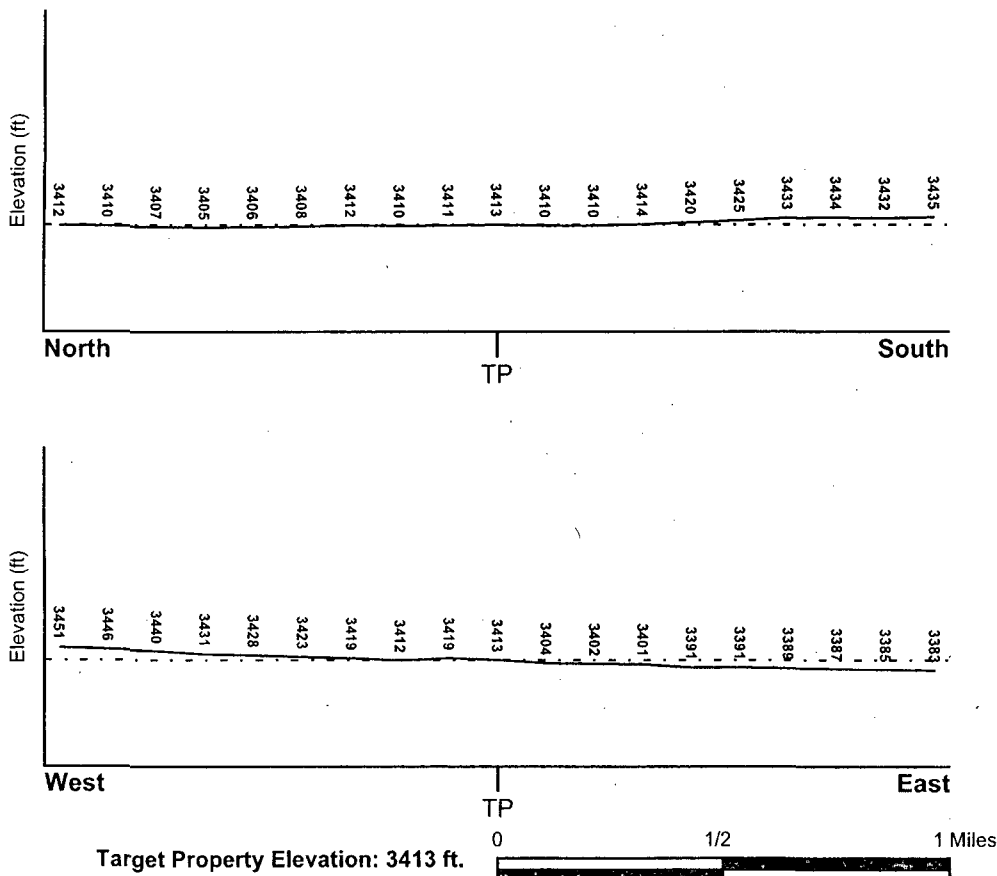
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 32103-D2 EUNICE, NM
General Topographic Gradient: General East
Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
LEA, NM

FEMA Flood
Electronic Data
Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
EUNICE

NWI Electronic
Data Coverage
Not Available

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| <u>MAP ID</u> | <u>LOCATION</u> <u>FROM TP</u> | <u>GENERAL DIRECTION</u> <u>GROUNDWATER FLOW</u> |
|---------------|-----------------------------------|---|
| Not Reported | | |

* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Cenozoic
System: Tertiary
Series: Pliocene
Code: Tpc (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Continental Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: BERINO

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|------------------------|-----------|-----------|--------------------|---|---|---------------------------|------------------------|
| Layer | Boundary | | Soil Texture Class | Classification | | Permeability Rate (in/hr) | Soil Reaction (pH) |
| | Upper | Lower | | AASHTO Group | Unified Soil | | |
| 1 | 0 inches | 8 inches | loamy fine sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 6.00 Min: 2.00 | Max: 7.80 Min: 6.60 |
| 2 | 8 inches | 60 inches | sandy clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 2.00 Min: 0.60 | Max: 8.40 Min: 7.40 |
| 3 | 60 inches | 70 inches | sandy clay loam | Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. | COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. | Max: 2.00 Min: 0.60 | Max: 9.00 Min: 7.90 |
| 4 | 70 inches | 75 inches | loamy sand | Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand. | COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand. | Max: 6.00 Min: 2.00 | Max: 8.40 Min: 7.90 |

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subinvariant soil types may appear within the general area of target property.

Soil Surface Textures: fine sandy loam
fine sand
gravelly - loam

Surficial Soil Types: fine sandy loam
fine sand
gravelly - loam

Shallow Soil Types: fine sandy loam

Deeper Soil Types: indurated
gravelly - loamy fine sand
clay loam
loamy fine sand
very gravelly - loam
fine sand
sandy loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

| <u>DATABASE</u> | <u>SEARCH DISTANCE (miles)</u> |
|------------------|--------------------------------|
| Federal USGS | 1.000 |
| Federal FRDS PWS | 1.000 |
| State Database | 1.000 |

FEDERAL USGS WELL INFORMATION

| <u>MAP ID</u> | <u>WELL ID</u> | <u>LOCATION FROM TP</u> |
|---------------|----------------|-----------------------------|
| 1 | USGS2932999 | 1/4 - 1/2 Mile ENE |

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

| <u>MAP ID</u> | <u>WELL ID</u> | <u>LOCATION FROM TP</u> |
|---------------|----------------|-----------------------------|
| 7 | NM3599313 | 1/2 - 1 Mile SSW |

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

| <u>MAP ID</u> | <u>WELL ID</u> | <u>LOCATION FROM TP</u> |
|---------------|-----------------|-----------------------------|
| 2 | NM1000000007246 | 1/4 - 1/2 Mile NW |
| 3 | NM1000000006959 | 1/2 - 1 Mile NW |
| 4 | NM1000000007245 | 1/2 - 1 Mile West |
| 5 | NM1000000007060 | 1/2 - 1 Mile SW |
| 6 | NM1000000007236 | 1/2 - 1 Mile WNW |
| 8 | NM1000000007325 | 1/2 - 1 Mile NNE |
| 9 | NM1000000007292 | 1/2 - 1 Mile South |
| 10 | NM1000000007259 | 1/2 - 1 Mile West |

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

| <u>DISTANCE FROM TP (Miles)</u> | <u>DISTANCE FROM TP (Miles)</u> |
|-------------------------------------|-------------------------------------|
| 1/2 - 1 Mile NNW | 1/2 - 1 Mile North |
| 1/2 - 1 Mile North | 1/2 - 1 Mile North |
| 1/2 - 1 Mile North | 1/2 - 1 Mile NNE |
| 1/2 - 1 Mile NNE | 1/2 - 1 Mile NNE |
| 1/2 - 1 Mile NNE | 1/2 - 1 Mile North |
| 1/2 - 1 Mile North | 1/2 - 1 Mile North |
| 1/2 - 1 Mile North | 1/2 - 1 Mile North |

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

DISTANCE FROM TP (Miles)

1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile North
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NE
1/2 - 1 Mile NE
1/2 - 1 Mile NE
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile North
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NNW
1/2 - 1 Mile NW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile NE
1/2 - 1 Mile ENE
1/2 - 1 Mile ENE
1/2 - 1 Mile ENE
1/4 - 1/2 Mile NNE
1/4 - 1/2 Mile North
1/4 - 1/2 Mile North
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/4 - 1/2 Mile NW
1/4 - 1/2 Mile NW
1/4 - 1/2 Mile NW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile NW

DISTANCE FROM TP (Miles)

1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NE
1/2 - 1 Mile NE
1/2 - 1 Mile NE
1/2 - 1 Mile NNE
1/2 - 1 Mile NNE
1/2 - 1 Mile North
1/2 - 1 Mile North
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NNW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NW
1/2 - 1 Mile NNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile NE
1/2 - 1 Mile NE
1/2 - 1 Mile ENE
1/2 - 1 Mile ENE
1/4 - 1/2 Mile NNE
1/4 - 1/2 Mile NNE
1/4 - 1/2 Mile North
1/4 - 1/2 Mile North
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/4 - 1/2 Mile NW
1/4 - 1/2 Mile NW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW
1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

DISTANCE FROM TP (Miles)

1/4 - 1/2 Mile NW
 1/8 - 1/4 Mile NNW
 1/4 - 1/2 Mile WNW
 1/2 - 1 Mile WNW
 1/2 - 1 Mile WNW
 0 - 1/8 Mile NNW
 0 - 1/8 Mile NNW
 0 - 1/8 Mile NNW
 1/8 - 1/4 Mile ENE
 1/8 - 1/4 Mile ENE
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile ENE
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile West
 1/2 - 1 Mile West
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 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/8 - 1/4 Mile SE
 1/8 - 1/4 Mile SSW
 1/8 - 1/4 Mile SE
 1/8 - 1/4 Mile SE
 1/8 - 1/4 Mile SE
 1/4 - 1/2 Mile ESE
 1/4 - 1/2 Mile ESE
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile ESE
 1/2 - 1 Mile ESE
 1/2 - 1 Mile ESE
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile WSW
 1/8 - 1/4 Mile SSW
 1/4 - 1/2 Mile WSW
 1/4 - 1/2 Mile WSW
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW

DISTANCE FROM TP (Miles)

1/8 - 1/4 Mile North
 1/8 - 1/4 Mile NNW
 1/4 - 1/2 Mile WNW
 1/2 - 1 Mile WNW
 1/2 - 1 Mile West
 0 - 1/8 Mile NNW
 0 - 1/8 Mile NNW
 0 - 1/8 Mile NNW
 1/8 - 1/4 Mile ENE
 1/8 - 1/4 Mile ENE
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile WNW
 1/4 - 1/2 Mile ENE
 1/4 - 1/2 Mile ENE
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile West
 1/2 - 1 Mile West
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 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/4 - 1/2 Mile West
 1/2 - 1 Mile West
 1/8 - 1/4 Mile SSW
 1/8 - 1/4 Mile SSW
 1/8 - 1/4 Mile SE
 1/8 - 1/4 Mile SE
 1/4 - 1/2 Mile ESE
 1/4 - 1/2 Mile ESE
 1/4 - 1/2 Mile ESE
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile ESE
 1/2 - 1 Mile ESE
 1/2 - 1 Mile ESE
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile East
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile West
 1/2 - 1 Mile West
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile WSW
 1/8 - 1/4 Mile SSW
 1/4 - 1/2 Mile WSW
 1/4 - 1/2 Mile WSW
 1/2 - 1 Mile WSW
 1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

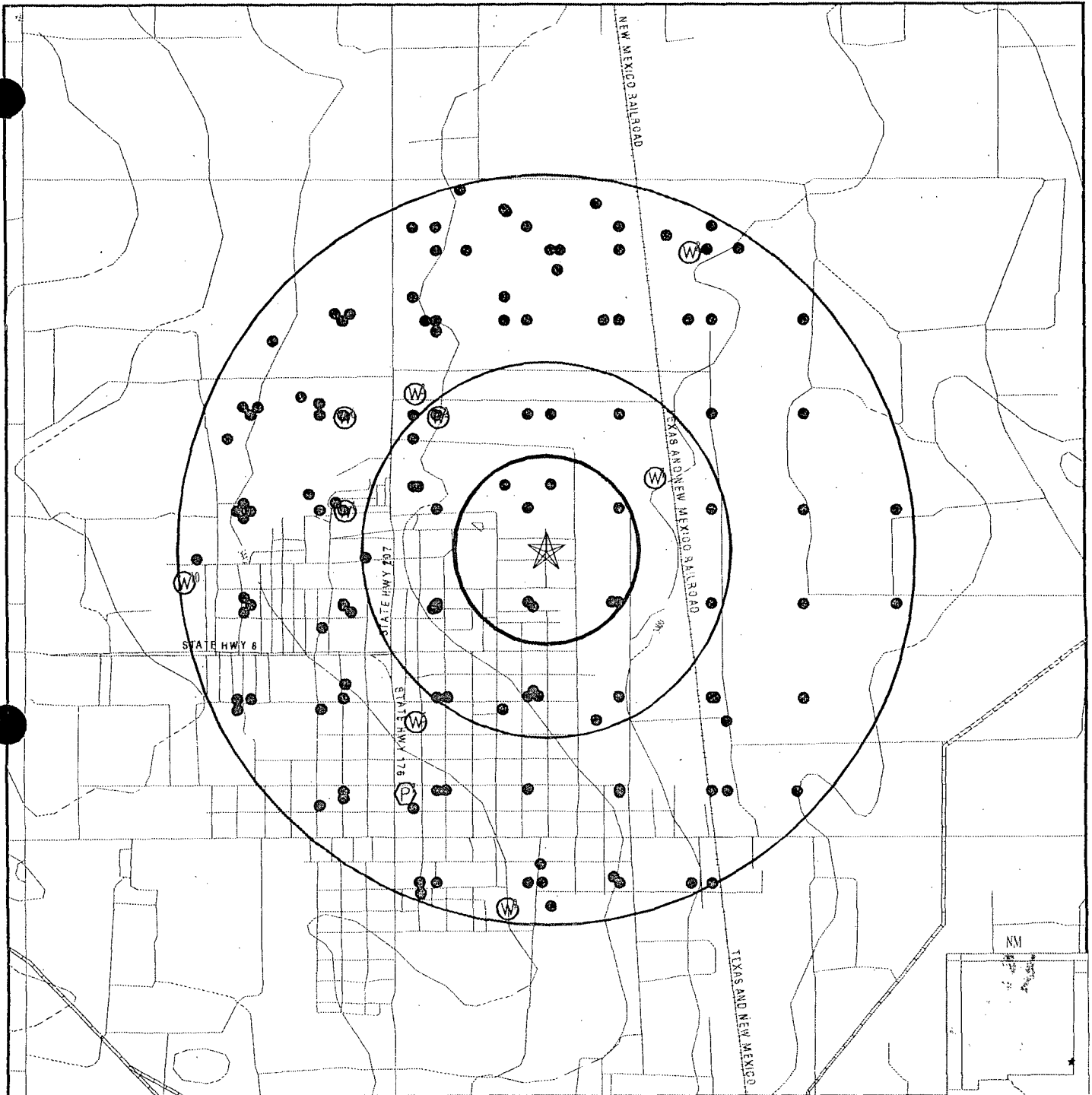
DISTANCE
FROM TP (Miles)

1/2 - 1 Mile WSW
1/2 - 1 Mile WSW
1/4 - 1/2 Mile South
1/4 - 1/2 Mile South
1/4 - 1/2 Mile South
1/4 - 1/2 Mile SSE
1/4 - 1/2 Mile SSE
1/4 - 1/2 Mile SW
1/4 - 1/2 Mile SW
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile ESE
1/2 - 1 Mile SW
1/2 - 1 Mile WSW
1/2 - 1 Mile WSW
1/4 - 1/2 Mile SSW
1/2 - 1 Mile WSW
1/2 - 1 Mile SE
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile SSE
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile *SW
1/2 - 1 Mile SSE
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile SSW
1/2 - 1 Mile SSE
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSW
1/2 - 1 Mile South

DISTANCE
FROM TP (Miles)

1/2 - 1 Mile WSW
1/4 - 1/2 Mile South
1/4 - 1/2 Mile South
1/4 - 1/2 Mile South
1/4 - 1/2 Mile South
1/4 - 1/2 Mile SSE
1/4 - 1/2 Mile SW
1/4 - 1/2 Mile SW
1/4 - 1/2 Mile SW
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile ESE
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile WSW
1/2 - 1 Mile WSW
1/2 - 1 Mile WSW
1/2 - 1 Mile WSW
1/4 - 1/2 Mile SSE
1/2 - 1 Mile SE
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SE
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile SSE
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile SW
1/2 - 1 Mile South
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile SSW
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile South
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSE
1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 1613105.1s



- County Boundary
- Major Roads
- Contour Lines
- Oil & Gas pipelines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Rice Operating Junction Box
 ADDRESS: Avenue Q
 Eunice NM 88231
 LAT/LONG: 32.4465 / 103.1522

CLIENT: ARCADIS Geraghty & Miller
 CONTACT: Kuohui Lowrie
 INQUIRY #: 1613105.1s
 DATE: February 13, 2006

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1

ENE

1/4 - 1/2 Mile

Lower

FED USGS

USGS2932999

| | | | |
|-------------------------------|--|--------------------------------|---------------------|
| Agency cd: | USGS | Site no: | 322657103084801 |
| Site name: | 21S.37E.27.23222 | | |
| Latitude: | 322657 | | |
| Longitude: | 1030848 | Dec lat: | 32.44928717 |
| Dec lon: | -103.14713557 | Coor meth: | M |
| Coor accr: | T | Latlong datum: | NAD27 |
| Dec latlong datum: | NAD83 | District: | 35 |
| State: | 35 | County: | 025 |
| Country: | US | Land net: | NESWNES27 T21S R37E |
| Location map: | Not Reported | Map scale: | Not Reported |
| Altitude: | 3396.70 | Altitude method: | U |
| Altitude accuracy: | Not Reported | Altitude datum: | NGVD29 |
| Hydrologic: | Landreth Monument Draws. New Mexico, Texas. Area = 4270 sq.mi. | | |
| Topographic: | Not Reported | | |
| Site type: | Ground-water other than Spring | Date construction: | Not Reported |
| Date inventoried: | Not Reported | Mean greenwich time offset: | MST |
| Local standard time flag: | Y | | |
| Type of ground water site: | Single well, other than collector or Ranney type | | |
| Aquifer Type: | Not Reported | | |
| Aquifer: | ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS | | |
| Well depth: | 101 | Hole depth: | Not Reported |
| Source of depth data: | Not Reported | Project number: | 463527100 |
| Real time data flag: | 0 | Daily flow data begin date: | 0000-00-00 |
| Daily flow data end date: | 0000-00-00 | Daily flow data count: | 0 |
| Peak flow data begin date: | 0000-00-00 | Peak flow data end date: | 0000-00-00 |
| Peak flow data count: | 0 | Water quality data begin date: | 0000-00-00 |
| Water quality data end date: | 0000-00-00 | Water quality data count: | 0 |
| Ground water data begin date: | 1965-11-16 | Ground water data end date: | 1996-02-08 |
| Ground water data count: | 8 | | |

Ground-water levels, Number of Measurements: 8

| Date | Feet below Surface | Feet to Sealevel | Date | Feet below Surface | Feet to Sealevel |
|------------|-----------------------|---------------------|------------|-----------------------|---------------------|
| 1996-02-08 | 49.81 | | 1991-04-25 | 58.90 | |
| 1986-03-06 | 52.18 | | 1981-03-02 | 55.91 | |
| 1976-01-20 | 60.29 | | 1970-12-14 | 68.07 | |
| 1966-03-04 | 73.43 | | 1965-11-16 | 74.82 | |

2

NW

1/4 - 1/2 Mile

Higher

NM WELLS

NM1000000007246

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 32060 | Id: | 108402 |
| X coord: | 673214 | Y coord: | 3591992 |
| Db file nb: | CP 00736 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 3 | Pod rec nb: | 108402 |
| Well numbe: | CP 00736 | Tws: | 21S |
| Rng: | 37E | Sec: | 27 |
| Q: | 1 | Q2: | 3 |
| Q3: | Not Reported | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 673262 | Northing: | 3591790 |
| Start date: | 19880910 | Finish dat: | 19880910 |
| Depth well: | 120 | Depth wate: | 76 |

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

3

NW
1/2 - 1 Mile
Higher

NM WELLS NM1000000006959

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 31774 | Id: | 108233 |
| X coord: | 673113 | Y coord: | 3592091 |
| Db file nb: | CP 00346 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 0 | Pod rec nb: | 108233 |
| Well numbe: | CP 00346 DCL | Tws: | 21S |
| Rng: | 37E | Sec: | 27 |
| Q: | 1 | Q2: | 3 |
| Q3: | 1 | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 673161 | Northing: | 3591889 |
| Start date: | 0 | Finish dat: | 0 |
| Depth well: | 0 | Depth wate: | 0 |

4

West
1/2 - 1 Mile
Higher

NM WELLS NM1000000007245

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 32059 | Id: | 108006 |
| X coord: | 672819 | Y coord: | 3591583 |
| Db file nb: | CP 00735 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 3 | Pod rec nb: | 108006 |
| Well numbe: | CP 00735 | Tws: | 21S |
| Rng: | 37E | Sec: | 28 |
| Q: | 4 | Q2: | 2 |
| Q3: | Not Reported | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 672867 | Northing: | 3591381 |
| Start date: | 19880726 | Finish dat: | 19880727 |
| Depth well: | 105 | Depth wate: | 0 |

5

SW
1/2 - 1 Mile
Higher

NM WELLS NM1000000007060

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 31875 | Id: | 108163 |
| X coord: | 673134 | Y coord: | 3590685 |
| Db file nb: | CP 00548 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 0 | Pod rec nb: | 108163 |
| Well numbe: | CP 00548 EXP | Tws: | 21S |
| Rng: | 37E | Sec: | 34 |
| Q: | 1 | Q2: | 1 |
| Q3: | 3 | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 673182 | Northing: | 3590483 |
| Start date: | 0 | Finish dat: | 0 |
| Depth well: | 0 | Depth wate: | 0 |

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

6

WNW
1/2 - 1 Mile
Higher

NM WELLS NM1000000007236

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 32050 | Id: | 108051 |
| X coord: | 672812 | Y coord: | 3591985 |
| Db file nb: | CP 00711 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 3 | Pod rec nb: | 108051 |
| Well numbe: | CP 00711 | Tws: | 21S |
| Rng: | 37E | Sec: | 28 |
| Q: | 2 | Q2: | 4 |
| Q3: | Not Reported | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 672860 | Northing: | 3591783 |
| Start date: | 19871001 | Finish dat: | 19871002 |
| Depth well: | 100 | Depth wate: | 65 |

7

SSW
1/2 - 1 Mile
Higher

FRDS PWS NM3599313

| | | | |
|-----------------|--|-------------------|--------------|
| PWS ID: | NM3599313 | PWS Status: | Active |
| Date Initiated: | 8710 | Date Deactivated: | Not Reported |
| PWS Name: | TEXACO GAS PLANT #1 PO BOX 1137 EUNICE, NM 88231 | | |

Addressee / Facility: Not Reported

| | | | |
|--------------------|--------------|---------------------|-----------|
| Facility Latitude: | 32 26 13 | Facility Longitude: | 103 09 30 |
| City Served: | Not Reported | | |
| Treatment Class: | Untreated | Population: | 00000050 |

PWS currently has or had major violation(s) or enforcement: Yes

Violations information not reported.

ENFORCEMENT INFORMATION:

| | | | |
|--------------------|-------------------------|-------------------|---------------------------------|
| System Name: | TEXACO SOUTH PLANT | | |
| Violation Type: | MCL, Acute (TCR) | | |
| Contaminant: | COLIFORM (TCR) | | |
| Compliance Period: | 1994-07-01 - 1994-07-31 | Analytical Value: | 00000000.00 |
| Violation ID: | 9400716 | Enforcement ID: | 9400950 |
| Enforcement Date: | 1994-07-22 | Enf. Action: | State Violation/Reminder Notice |
| System Name: | TEXACO SOUTH PLANT | | |
| Violation Type: | MCL, Acute (TCR) | | |
| Contaminant: | COLIFORM (TCR) | | |
| Compliance Period: | 1994-07-01 - 1994-07-31 | Analytical Value: | 00000000.00 |
| Violation ID: | 9400716 | Enforcement ID: | 9400951 |
| Enforcement Date: | 1994-07-22 | Enf. Action: | State Public Notif Requested |

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

ENFORCEMENT INFORMATION:

| | | | |
|--------------------|---------------------------------|-------------------|---------------------------------|
| System Name: | TEXACO SOUTH PLANT | Analytical Value: | 00000000.00 |
| Violation Type: | MCL, Acute (TCR) | Enforcement ID: | 9400952 |
| Contaminant: | COLIFORM (TCR) | Enf. Action: | State Public Notif Received |
| Compliance Period: | 1994-07-01 - 1994-07-31 | | |
| Violation ID: | 9400716 | | |
| Enforcement Date: | 1994-08-11 | | |
| System Name: | TEXACO SOUTH PLANT | Analytical Value: | 00000000.00 |
| Violation Type: | Monitoring, Routine Major (TCR) | Enforcement ID: | 9600277 |
| Contaminant: | COLIFORM (TCR) | Enf. Action: | State Violation/Reminder Notice |
| Compliance Period: | 1995-12-01 - 1995-12-31 | | |
| Violation ID: | 9600038 | | |
| Enforcement Date: | 1996-01-03 | | |
| System Name: | TEXACO SOUTH PLANT | Analytical Value: | 00000000.00 |
| Violation Type: | Monitoring, Routine Major (TCR) | Enforcement ID: | 9600278 |
| Contaminant: | COLIFORM (TCR) | Enf. Action: | State Public Notif Requested |
| Compliance Period: | 1995-12-01 - 1995-12-31 | | |
| Violation ID: | 9600038 | | |
| Enforcement Date: | 1996-01-03 | | |
| System Name: | TEXACO SOUTH PLANT | Analytical Value: | 00000000.00 |
| Violation Type: | Monitoring, Routine Major (TCR) | Enforcement ID: | 9600279 |
| Contaminant: | COLIFORM (TCR) | Enf. Action: | State Public Notif Received |
| Compliance Period: | 1995-12-01 - 1995-12-31 | | |
| Violation ID: | 9600038 | | |
| Enforcement Date: | 1996-01-11 | | |

8

NNE
1/2 - 1 Mile
Lower

NM WELLS NM1000000007325

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 32135 | Id: | 151196 |
| X coord: | 674304 | Y coord: | 3592717 |
| Db file nb: | CP 00881 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 3 | Pod rec nb: | 151196 |
| Well numbe: | CP 00881 | TwS: | 21S |
| Rng: | 37E | Sec: | 22 |
| Q: | 4 | Q2: | 4 |
| Q3: | 3 | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 674352 | Northing: | 3592515 |
| Start date: | 19990904 | Finish dat: | 19990907 |
| Depth well: | 95 | Depth wate: | 53 |

9

South
1/2 - 1 Mile
Higher

NM WELLS NM1000000007292

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

| | | | |
|-------------|----------------------------|-------------|--------------|
| Objectid: | 32106 | Id: | 108038 |
| X coord: | 673550 | Y coord: | 3589888 |
| Db file nb: | CP 00835 | | |
| Use: | 72-12-1 LIVESTOCK WATERING | | |
| Diversion: | 3 | Pod rec nb: | 108038 |
| Well numbe: | CP 00835 | Tws: | 21S |
| Rng: | 37E | Sec: | 34 |
| Q: | 3 | Q2: | 2 |
| Q3: | 3 | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 673598 | Northing: | 3589686 |
| Start date: | 19940221 | Finish dat: | 19940225 |
| Depth well: | 145 | Depth wate: | 0 |

10
West
1/2 - 1 Mile
Higher

NM WELLS NM1000000007259

| | | | |
|-------------|--------------------------------|-------------|--------------|
| Objectid: | 32073 | Id: | 108261 |
| X coord: | 672121 | Y coord: | 3591266 |
| Db file nb: | CP 00749 | | |
| Use: | 72-12-1 DOMESTIC ONE HOUSEHOLD | | |
| Diversion: | 3 | Pod rec nb: | 108261 |
| Well numbe: | CP 00749 | Tws: | 21S |
| Rng: | 37E | Sec: | 28 |
| Q: | 3 | Q2: | 4 |
| Q3: | 2 | Zone: | Not Reported |
| X: | Not Reported | Y: | Not Reported |
| Easting: | 672169 | Northing: | 3591064 |
| Start date: | 19900615 | Finish dat: | 19900622 |
| Depth well: | 123 | Depth wate: | 75 |