

AP - 022

**GENERAL
CORRESPONDENCE**

YEAR(S):

Nov. 2000

AP-22

PRELIMINARY SITE INVESTIGATION REPORT

WILLIAMS PIT SITE Eddy County, New Mexico

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Prepared For:

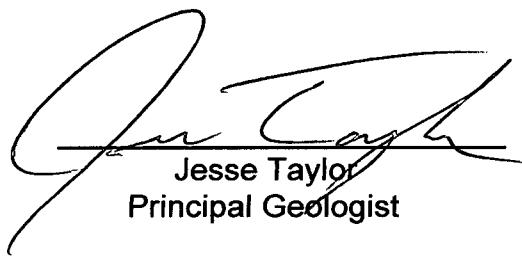
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

ETGI Project # YPC 2200D

Prepared By:
Environmental Technology Group, Inc.
2540 W. Marland
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November 2000



Jesse Taylor
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Project Manager

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1.0 INTRODUCTION

Environmental Technology Group, Inc. (ETGI) conducted a subsurface investigation of this former pit location on behalf of Yates Petroleum Corporation (Yates). The investigation was conducted in order to document subsurface conditions resulting from operations at the former pit.

The site is located in the NE1/4 of the NW1/4 of Section 25, Township 18S, Range 26 East in Eddy County, New Mexico as depicted on Figure 1, the Site Location Map. The former pit area measures approximately 90 feet by 130 feet. The southwestern portion of the pit appears to have been in operation later than the remaining portion of the pit. However, the entire pit area is no longer in use and has been backfilled. The boring locations are depicted on Figure 2, the site map.

2.0 SUMMARY OF FIELD ACTIVITIES

ETGI mobilized a rotary drilling rig to the site on October 21, 2000. Mr. Ken Dutton, Field Operations Manager and Camille Reynolds supervised the field activities. David Haggith, Environmental Coordinator for Yates and Mike Stubblefield, representative of the New Mexico Oil Conservation Division (OCD), were also present.

Atkins Engineering, of Roswell, New Mexico, performed the drilling with Mort Bates, Senior Driller, in charge of the drilling rig. A total of five soil borings were advanced at the site. One soil sample was collected from soil borings SB-1, SB-2 and SB-3 at a depth of 10-12 feet bgs, which was total depth for these borings. Soil boring SB-4 had one sample collected from 17-19 bgs, which was also at total depth. Samples were collected from soil boring SB-5 at depths of 10-12, 17-19 and 24-26 feet bgs.

A ground water sample was collected from this boring for analysis. Both the depth to ground water and the total depth were approximately 40 feet bgs. Immediately after the soil and ground water samples were collected, the borings were backfilled with bentonite in order to prevent the potential for vertical migration of hydrocarbons or chlorides.

A chloride field test was conducted on each sample and a Photoionization Detector (PID) was utilized to screen Volatile Organic Compounds (VOCs). Proper QA/QC procedures were followed during all sampling procedures as described below. Each soil; and ground water sample was submitted to Environmental Lab of Texas to be tested for Benzene, Toluene, Ethyl Benzene and Xylenes (BTEX, EPA Method 8021B), Total Petroleum Hydrocarbons (TPH, EPA Method 8015 Modified GRO/DRO) as well as Chlorides (EPA Method 9253).

3.0 SITE DESCRIPTION

3.1 Regional Geology/Hydrogeology

The site is located approximately one half mile west of the west channel of the Pecos River and one and one half mile south of the intermittent stream, Rio Penasco. This places it in the geographic feature known as Orchard Park Terrace, which is only slightly dissected and slopes at about five degrees to the east. Surface drainage is to the east toward the west channel of the Pecos River.

The site is located on Quaternary alluvium associated with the Pecos River flood plain and drainages originating in the Sacramento Mountains to the west. The alluvium is underlain by the Triassic age Dockum Group which consists primarily of red silts and sands which are slightly to moderately indurated. The Dockum Group is approximately 1,000 feet thick in the site area and is divided into the Pierce Canyon redbeds and Santa Rosa sandstone in the site vicinity. These formations are unconformably underlain by the upper Permian Rustler Formation (gypsum, redbeds and dolomites) which is unconformably underlain by the middle Permian Chalk Bluff Formation (back reef deposits of dolomite, evaporites, redbeds and sandstone).

This area is located near the eastern margin of the Roswell Basin physiographic province, a north-south trending feature located between the Sacramento Mountains to the west and the Permian Basin to the east. Within this feature, ground water commonly occurs in the alluvium near the Pecos River and in the Permian formations throughout the feature. Aquifers within the Triassic Dockum group are usually thin and discontinuous resulting in poor quality and low volumes.

In the site vicinity, ground water generally flows to the southeast toward the downgradient direction of the west channel of the Pecos River, which joins the main channel at the confluence with Brantley Reservoir. The east-west trending intermittent streams appear to have little influence on the regional gradient, however local variations may occur in the vicinity of these drainages during precipitation events.

Data collected by the United States Weather Bureau indicate that the average annual precipitation in the site vicinity is approximately 12.4 inches. This amount occurs primarily as storm events during the period between June and October. Infiltration from these events are commonly minimal given the high rates of surface runoff and evaporation.

3.2 Site Geology/Hydrology

The soil borings indicate that the pit was excavated to between 5 to 10 feet bgs. The backfill material was underlain by a red-brown, fine-grained sand with occasional caliche nodules and thin stringers of sandy clay.

The sand was dry to a depth of approximately 38 feet bgs where the capillary fringe was detected. Measurements taken in the uncompleted borehole indicate that the water table is located at approximately 40 feet bgs in the unconsolidated alluvial sand.

3.3 New Mexico Oil Conservation Division (NMOCD) Soil Classification

During the site investigation, no soils that may be characterized by OCD guidelines as Highly Contaminated/Saturated Soils were detected at the site. Based on PID data and subsequent laboratory data, host soils at the site were generally clean with no significant staining or odor.

The depth to groundwater, as measured from the lowermost zone of Highly Contaminated/Saturated Soils is approximately 40 feet. This interval is less than the 51 foot interval required for an OCD Ranking of less than 20 points.

The water well database, maintained by the state engineer's office, was accessed in order to determine the location and type of nearby water wells in the area. The data indicate that there are no water wells located within 1,000 feet of the site. This radius and the location of water wells in the vicinity are provided as Figure 3.

As depicted on Figures 1 and 2, there are no bodies of surface water located within 1,000 feet of the site. These site conditions result in an OCD Ranking of greater than 19 points. The action levels for a site with a Ranking Score of greater than 19 are as follows:

- Benzene - 10 ppm
- BTEX - 50 ppm
- TPH - 100 ppm

3.4 Distribution of Hydrocarbons in the Unsaturated Zone

During the site investigation, no soils that may be characterized by OCD guidelines as Highly Contaminated/Saturated Soils were detected at the site. Based on PID data and subsequent laboratory data, host soils at the site were generally clean with no significant staining or odor.

3.5 Distribution of Hydrocarbons in the Saturated Zone

The ground water sample collected from soil boring SB-5 exceeded OCD regulatory standards for benzene and BTEX. The sample was below the OCD regulatory levels for toluene, ethylbenzene, xylenes and was below the method detection limit for TPH.

3.6 Distribution of Chlorides in the Unsaturated Zone

Elevated levels of chlorides were detected in the unsaturated zone throughout the site. Concentrations of chlorides generally increased with depth in soil boring SB-5 between 10 to 26 feet bgs. The maximum soil chlorides level of 11,108 mg/Kg was detected in the sample from soil boring SB-5 at a depth of 24 to 26 feet bgs.

3.7 Distribution of Chlorides in the Saturated Zone

The ground water sample collected from soil boring SB-5 was found to have 30,842 mg/L chlorides concentration. Background data for chlorides concentrations in the area, as determined from the state engineers database (Appendix C), are in the range of 400 to 600 mg/L.

4.0 SUMMARY AND CONCLUSIONS

The site has an OCD Ranking Score of 20 points. The soil action levels for a site with this score are as follows:

- Benzene - 10 ppm
- BTEX - 50 ppm
- TPH - 100 ppm

None of the soils observed in the host soil appear to exceed these criteria. None of the back fill material appears to be impacted by hydrocarbons.

The ground water sample collected from SB-5 was found to have a benzene concentration of 0.535 mg/L, which is in excess of OCD standards. The concentrations of toluene, ethylbenzene and xylenes were below regulatory limits and TPH concentrations were below the method detection limit.

Elevated levels of chlorides were detected in the unsaturated zone throughout the site with slightly lower concentrations present in the western portion of the western pit. The chlorides concentrations did not appear to vary greatly with depth. The maximum soil chlorides level of 11,108 mg/Kg was detected in the sample from soil boring SB-5 at a depth of 24 to 26 feet bgs.

The ground water sample collected from soil boring SB-5 was found to have 30,842 mg/L chlorides concentration. Background data for chlorides concentrations in the area, as determined from the state engineers database (Appendix C), are in the range of 400 to 600 mg/L.

A search of the state engineer's database indicates that there are no domestic water wells within 1,000 feet of the site. In addition, no listed water wells were present in the assumed downgradient direction to the south-southeast (USGS and state engineer's office data).

The assumed gradient of south-southeast is based on the assumption that the west channel of the Pecos River is a "Gaining Stream". Therefore, ground water from the site would have to intersect the streambed at an elevation less than that observed at the site. Based on the USGS topographic map, the site elevation is approximately 3285 feet msl. Given that the depth to ground water at the site is 40 feet, the estimated elevation of ground water at the site is 3245 feet msl. The nearest Pecos river streambed elevation of 3250 feet msl or less is located over two miles from the site. Therefore, the capacity for the impacted ground water observed at the site, to impact the quality of water in the Pecos River, seems minimal.

5.0 QA/QC PROCEDURES

5.1 Soil Sampling

Samples of subsurface soils were obtained utilizing either a split spoon sampler (air rotary drilling rig) or a two-inch, continuous sampling tube with a clean polybuterate liner (Geo-Probe⁷). Representative soil samples were divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample was placed in a disposable sample bag. The bag was labeled and sealed for headspace analysis using a photoionization detector (PID) calibrated to a 100 ppm isobutylene standard. Each sample was allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample was placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity to limit the amount of headspace present. Each container was labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler was sealed for shipment to the laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

Soil samples were delivered to Environmental Lab of Texas, Inc. in Midland, Texas for BTEX and TPH analyses using the methods described below. Soil samples were analyzed for BTEX and TPH-GRO/DRO within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030

- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO

5.2 Ground Water Sampling

Monitoring wells were developed and purged with a clean PVC bailer. The bailer was cleaned prior to each use with Liqui-Nox⁷ detergent and rinsed with distilled water. Monitoring wells with sufficient recharge were purged by removing a minimum of three well volumes. Monitoring wells that do not recharge sufficiently were purged until no additional ground water can be obtained.

After purging the wells, ground water samples were collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Ground water sample containers were filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers will be filled first and polynuclear aromatic hydrocarbons (PAH) containers second).

Ground water samples collected for BTEX analysis were placed in 40 ml glass VOA vials equipped with Teflon lined caps. The containers were provided by the analytical laboratory. The vials were filled to a positive meniscus, sealed, and visually checked to ensure the absence of air bubbles.

Ground water samples collected for PAH analysis were filled to capacity in sterile, one liter glass containers equipped with Teflon lined caps. Ground water samples collected for metals analysis were filled to capacity in sterile, one liter plastic containers equipped with Teflon lined caps. The containers were provided by the analytical laboratory.

The filled containers were labeled and placed on ice in an insulated cooler. The cooler was sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

The ground water samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015-GRO/DRO

5.3 Decontamination Of Equipment

Cleaning of drilling equipment was the responsibility of the drilling company. In general, the cleaning procedures consisted of using high pressure steam to wash the drilling and sampling equipment prior to drilling and prior to starting each hole. Prior to use, the sampling equipment was cleaned with Liqui-Nox⁷ detergent and rinsed with distilled water.

5.4 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

6.0 LIMITATIONS

Environmental Technology Group, Inc. has prepared this Preliminary Investigation Report to the best of its ability. No other warranty, expressed or implied, is made or intended.

Environmental Technology Group, Inc. has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Environmental Technology Group, Inc. has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Environmental Technology Group, Inc. has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Environmental Technology Group, Inc. also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Yates Petroleum Corp. The information contained in this report including all exhibits and attachments, may not be used by any other party without the express consent of Environmental Technology Group, Inc. and/or Yates Petroleum Corp.

TABLES

Table 1

SOIL CHEMISTRY

YATES PETROLEUM CORPORATION
 WILLIAMS PIT SITE
 ARTESIA, NEW MEXICO
 ETGI Project # YPC 2200D

All concentrations are in mg/L

SAMPLE NAME	SAMPLE DATE	SAMPLE DEPTH	SW 846-8021B, 5030					TPH 8015M		SW 846-9253 CHLORIDES
			BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES	GRO C6-C10	DRO >C10-C28	
SB-1	10/21/00	10-12'								7385
SB-2	10/21/00	10-12'								10706
SB-3	10/21/00	10-12'								10147
SB-4	10/21/00	17-19'								5406
SB-5	10/21/00	10-12'	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	<20
SB-5	10/21/00	17-19'								3729
SB-5	10/21/00	24-26'								9040
Background	10/21/00	0-2'								11108
										142

TABLE 2

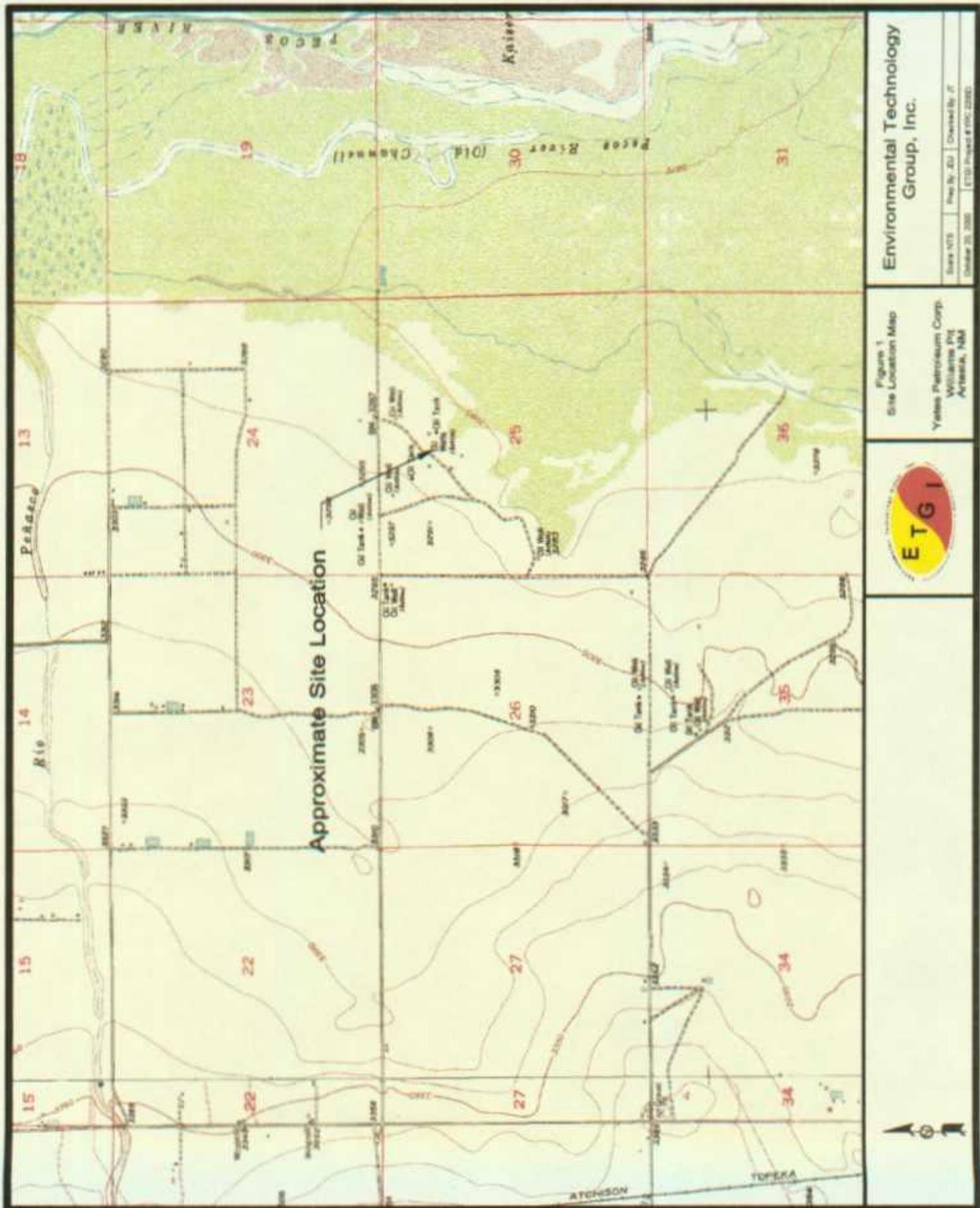
GROUND WATER CHEMISTRY

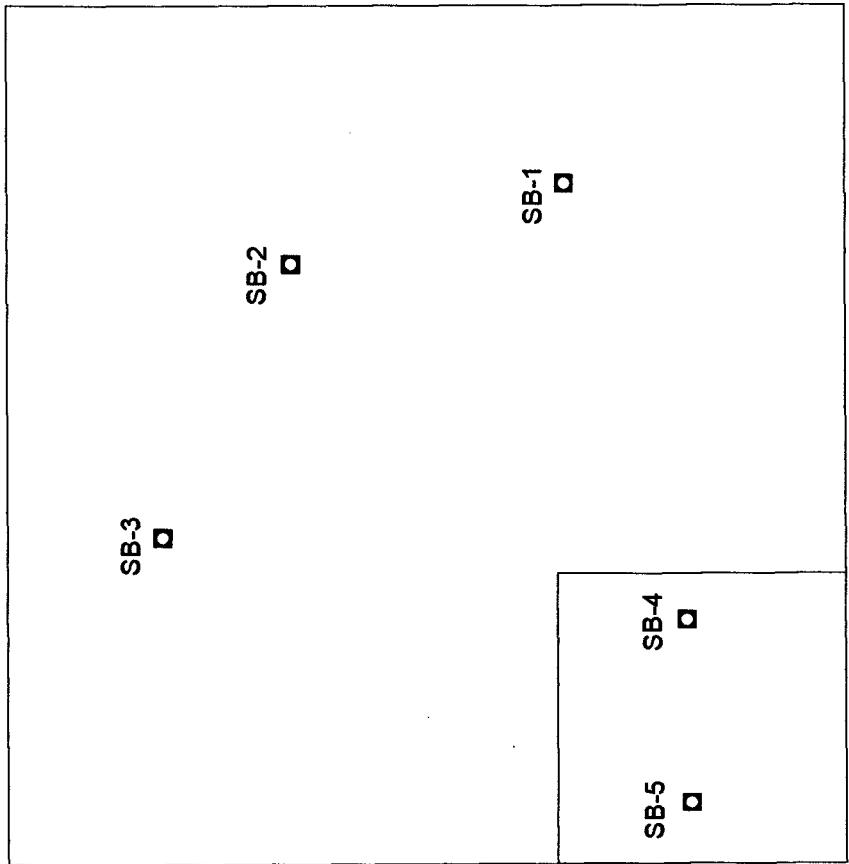
YATES PETROLEUM CORPORATION
WILLIAMS PIT SITE
ARTESIA, NEW MEXICO
ETGI Project # YPC 2200D

All concentrations are in mg/L

SAMPLE NAME	SAMPLE DATE	SW 846-8021B, 5030					TPH 8015M			SW 846-9253	
		BENZENE	TOLUENE	ETHYL-BENZENE	M,P-XYLENES	O-XYLENES	GRO C6-C-10	DRO >C10-C28	TOTAL TPH	CHLORIDES	
SB-5	10/21/00	0.535	0.012	0.02	0.021	0.013	<0.50	<0.50	<1.00	30842	

FIGURES





LEGEND:

Soil Boring Location

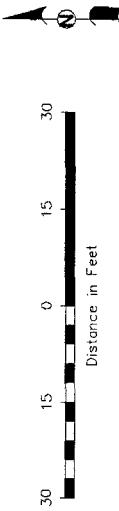


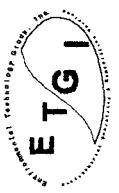
Figure 2
Site Map

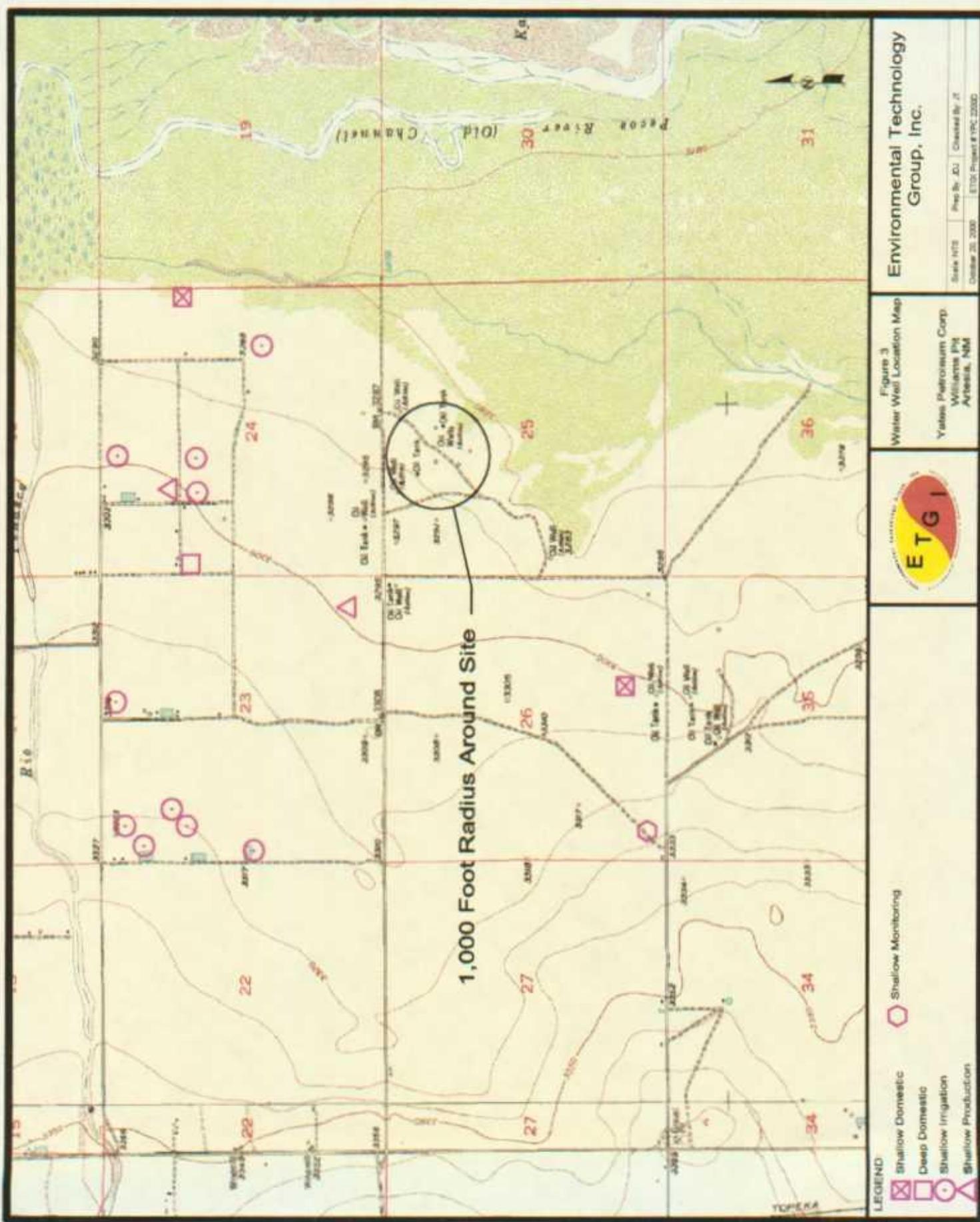
Yates Petroleum Corp.
Williams Pit
Artesia, NM

**Environmental Technology
Group, Inc.**

Scale: 1" = 30' Prop By: J.D. Checked By: JT

November 14, 2000 ETGI Project # YPC 22000





APPENDICES

APPENDIX A

Soil Boring SB-1

Legend

PID Head-space reading in ppm obtained with a photo-ionization detector.
 Indicates samples selected for laboratory analysis.

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Petroleum Stain	Soil Description
--------------	--------------	-------------	----------------	-----------------	------------------

0					
5					
10					
15					

Backfill - Mixed, Sandy Loam/Sand

Sand - (SP) - Red-Brown, very fine grained, well sorted, interbedded with caliche nodules.

None

None

Sand - (SP) - Brown-Black, very fine grained, well sorted.

None

None

0.0

TD

Soil Boring Details

Date Drilled 10/21/00
 Plugged - Surface to TD with Bentonite and hydrated with deionized water.

Soil Boring Log Details

Soil Boring SB-1

Yates Pet Corp. Williams Pit Eddy, NM



Environmental Technology Group, Inc.

State NTB Proj By RD Checked By RD
 November 2, 2000 ETG Project # YFG 2000/0

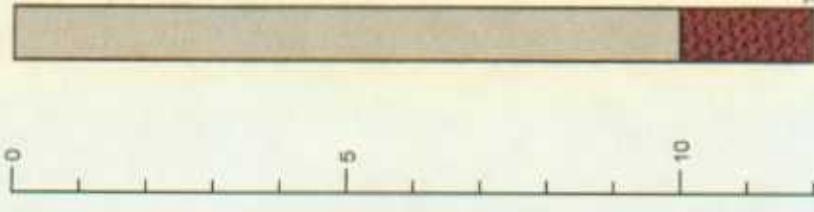
Soil Boring SB-2

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor
			Stain
0			

Backfill - Mixed, Sandy Loam/Sand

Legend

PID Head-space reading in ppm obtained with a photo-ionization detector.
 ○ Indicates samples selected for laboratory analysis.



Sand - (SP) - Brown-Black, very fine grained, well sorted.
 None

(3.6)

TD

Soil Boring Details

Date Drilled 10 / 21 / 00
 Plugged - Surface to TD with Bentonite and hydrated with deionized water.

Environmental Technology Group, Inc.

Soil Boring Log Details

Soil Boring SB-2

Yates Pet Corp. Williams Pit Eddy, NM

Borehole NTS	Prep By: RD	Checked By: RD
November 2, 2000	ETG Project # YPC 22000	



Soil Boring SB-3

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor	Soil Description
0				Backfill - Mixed, Sandy Loam/Sand.

Legend

- PID Head-space reading in ppm obtained with a photo-ionization detector.
- Indicates samples selected for laboratory analysis.

5

10

TD

15

(6.8)

None

Sand - (SP) - Brown-Black, very fine grained, well sorted.

Soil Boring Details

Date Drilled 10 / 21 / 00
 Plugged - Surface to TD with Bentonite and hydrated with deionized water.

Soil Boring Log Details
 Soil Boring SB-3

Yates Pet Corp. Williams Pit Eddy, NM

Environmental Technology Group, Inc.

Boat NTS	Prep By	Checked By
November 2, 2000	ETG Project # YHC 22000	

Soil Boring SB-4

Depth (feet)	Soil Columns	PID Reading	Petroleum Odor
			<u>Stain</u>
0			
5			
10			
15			
20			

0

5

10

15

20

Legend

PID Head-space reading in ppm obtained with a photo-ionization detector.
 ○ Indicates samples selected for laboratory analysis.

Backfill - Mixed, Sandy Loam/Sand.

PSH-saturated soil - Mixed, Sandy Loam, Sand.

Soil Boring Details

Sand - (SP) - Brown-Black, very fine grained, well sorted.

Date Drilled 10/21/00
 Plugged - Surface to TD with Bentonite and Hydrated with deionized water.

Moderate

None

(2.9)

TD

Soil Boring Log Details

Soil Boring SB-4

Yates Pet Corp. Williams Pit Eddy, NM

Environmental Technology Group, Inc.



WPC 2000

Bentonite

Water

Deionized

Water

Hydrated

Bentonite

Plugged

Surface

To

TD

With

Water

Soil Boring SB-5

Depth
(feet)

PID
Reading

Soil
Columns

Petroleum
Stain

Legend

PID

Head-space reading in ppm obtained
with a photo-ionization detector.

Indicates samples selected for
laboratory analysis.

0

TD

Backfill - Mixed, Sandy Loam/Sand.

(2.7) None Sand - (SP) - Brown-Black, very fine grained, well sorted.

Backfill - Mixed, Sandy Loam/Sand.

(0.6) None Sand - (SP) - Brown-Black, very fine grained, well sorted.

Clay layer with Heavy Plasticity.

Backfill - Mixed, Sandy Loam/Sand.

(1.9) None Sand - (SP) - Brown-Black, very fine grained, well sorted.

Backfill - Mixed, Sandy Loam/Sand.

(0.0) None

TD

40

35

30

25

20

15

10

5

0

Soil Boring Log Details

Soil Boring SB-5

Williams Pit

Eddy, NM

Environmental Technology
Group, Inc.



Date Drilled 10/21/00

Plugged - Surface to TD with Bentonite
and hydrated with deionized
water.

Soil Boring Details

Borehole NTS Prep No. 86 Checked By KC
November 2, 2000 ETG Project # YPC 20000

APPENDIX B

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOSS, N.M. 86240
 FAX: 505-397-4701
 FAX: 915-520-4310

Sample Type: Soil
 Sample Condition: Intact/ Iced/ 1 deg. C
 Project #: YPC 2200D
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 10/29/00

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg	SAMPLE DATE
32918	Inez SB-1 15-16.5'	3.06	1.18	11.5	12.0	4.39	10/19/00
32929	Lattion SB-2 13-15'	<0.025	0.058	0.056	0.122	0.040	10/20/00
32941	Williams SB-5 10-12'	<0.025	<0.025	<0.025	<0.025	<0.025	10/21/00
32947	Scripp SB-2 30-33'	<0.025	<0.025	<0.025	<0.025	<0.025	10/21/00

%IA	104	105	105	105	100
%EA	93	95	96	96	92
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-8021B, 5030

Roland K. Tuttle

11-2-00

Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Sample Type: Soil
 Sample Condition: Intact/ Iced/ 1 deg. C
 Project #: YPC 22C0D
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOBBS, N.M. 88240
 FAX: 505-397-4701
 FAX: 915-520-4310

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 10/24/00

ELT#	FIELD CODE	GRO C6-C10 mg/kg	ODO >C10-C78 mg/kg	SAMPLE DATE
32918	Inez SB-1 15-16.5'	214	790	10/19/00
32929	Lattion SB-2 13-15'	<10	<10	10/20/00
32941	Williams SB-5 17-19'	<10	<10	10/21/00
32947	Scripp SB-2 30-33'	<10	<10	10/21/00

% INSTRUMENT ACCURACY	78	84
% EXTRACTION ACCURACY	78	68
BLANK	<10	<10

Methods: SW 846-8015M

Roland K. Tuttle
Roland K. Tuttle

11-2-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOBBS, N.M. 88240
 FAX: 505-397-4701
 FAX: 915-520-4310

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 1 deg. C
 Project #: YPC 22000
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 10/31/00

ELT#	FIELD CODE	GRO	DRO	SAMPLE DATE
		C6-C10 mg/L	>C10-C28 mg/L	
32922	Inez SB-1 67'	<0.50	<0.50	10/19/00
32935	Lattion SB-2 47'	<0.50	<0.50	10/20/00
32944	Williams SB-5 30'	<0.50	<0.50	10/21/00
32950	Scripp SB-2 40'	<0.50	<0.50	10/21/00

% INSTRUMENT ACCURACY	103	123
% EXTRACTION ACCURACY	115	147
BLANK	<0.50	<0.50

Methods: SW 846-8015M

Roland K. Tuttle 11-2-00
 Roland K. Tuttle Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

Sample Type: Soil
 Sample Condition: Intact/ Iced/ 1 deg. C
 Project #: YPC 22000
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOBBS, N.M. 88240
 FAX: 505-397-4701
 FAX: 915-520-4310

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 10/25/00

ELT#	FIELD CODE	Chloride mg/kg	SAMPLE DATE
32918	Inez SB-1 15-16.5'	12230	10/19/00
32919	Inez SB-1 19-21'	4372	10/19/00
32920	Inez SB-1 24-26'	2623	10/19/00
32921	Inez SB-1 36-38'	3978	10/19/00
32923	Inez SB-2 17.5-19.5'	1240	10/19/00
32924	Inez SB-3 17-19'	13471	10/19/00
32925	Inez Background	44	10/19/00
32926	Lattion SB-1 8-9'	886	10/20/00
32927	Lattion SB-1 14-16'	886	10/20/00
32928	Lattion SB-2 8-9'	6736	10/20/00
32929	Lattion SB-2 13-15'	6381	10/20/00
32930	Lattion SB-2 20-21'	7267	10/20/00
32931	Lattion SB-3 12.5-14.5'	3722	10/20/00
32932	Lattion SB-4 13-15'	2304	10/20/00
32933	Lattion SB-5 13-15'	7445	10/20/00
32934	Lattion SB-6 14-16'	4538	10/20/00
32936	Lattion Background	18	10/20/00
32937	Williams SB-1 10-12'	7385	10/21/00
32938	Williams SB-2 10-12'	10706	10/21/00
32939	Williams SB-3 10-12'	10147	10/21/00
32940	Williams SB-4 17-19'	5406	10/21/00
32941	Williams SB-5 10-12'	3729	10/21/00
32942	Williams SB-5 17-19'	9040	10/21/00
32943	Williams SB-5 24-26'	11108	10/21/00
32945	Scripp SB-1 18.5-20.5'	8863	10/21/00
32946	Scripp SB-2 9-10'	886	10/21/00
32947	Scripp SB-2 30-33'	7550	10/21/00
32948	Scripp SB-2 35-37'	301	10/21/00
32949	Scripp SB-2 39-41'	1560	10/21/00
32951	Williams Background	142	10/21/00
32952	Scripp Background	35	10/21/00
QUALITY CONTROL		5140	
TRUE VALUE		5000	
% INSTRUMENT ACCURACY		103	
BLANK		<10	

Methods: SW 846-9253

R. L. - Dept
Randal K. Tuttle

11-2-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOBBS, N.M. 86240
 FAX: 505-397-4701
 FAX: 915-520-4310

Sample Type: Water
 Sample Condition: Intact/ Iced/ HCl/ 1 deg. C
 Project #: YPC 2200D
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 10/24/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	<i>o</i> -XYLENE mg/L	SAMPLE DATE
32922	Inez SB-1 67'	0.088	0.007	0.056	0.056	0.026	10/19/00
32935	Lattion SB-2 47'	0.004	<0.001	<0.001	<0.001	<0.001	10/20/00
32944	Williams SB-5 30'	0.535	0.012	0.020	0.021	0.013	10/21/00
32950	Scripp SB-2 40'	0.015	<0.001	0.001	0.002	0.001	10/21/00

%IA	96	96	99	101	96
%EA	106	89	95	86	90
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: EPA SW 846-8021B, 5030

Roland K. Tuttle
 Roland K. Tuttle

11-2-00
 Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
 ATTN: MR. JESSE TAYLOR
 2540 W. MARLAND
 HOBBS, N.M. 88240
 FAX: 505-397-4701
 FAX: 915-520-4310

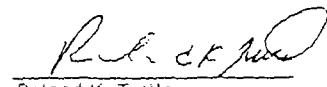
Sample Type: Water
 Sample Condition: Intact/ Iced/ 1 deg. C
 Project #: YPC 2200D
 Project Name: Yates Petroleum
 Project Location: Artesia, N.M.

Sampling Date: See Below
 Receiving Date: 10/23/00
 Analysis Date: 11/02/00

ELT#	FIELD CODE	Chloride mg/L	SAMPLE DATE
32922	Inez SB-1 67'	17725	10/19/00
32935	Lattion SB-2 47'	81535	10/20/00
32944	Williams SB-5 30'	30842	10/21/00
32950	Scripp SB-2 40'	25170	10/21/00

QUALITY CONTROL	5140
TRUE VALUE	5000
% INSTRUMENT ACCURACY	103
BLANK	<10

Methods: SW 846-9253


Roland K. Tuttle 11-2-00
 Date

2 of 4.

Environmental Lab of Texas, Inc. 12600 West 1-20 East Odessa, Texas 79763
 CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST
 (915) 563-1800 FAX (915) 563-1713

 Project Manager: **Jesse Taylor**
 Company Name & Address: **ET 611 2540 West Marland, Hobbs, NM**
 Phone #: **397-4882**
 FAX #: **397-4701**

 ANALYSIS REQUEST
 COC: 264

LAB # (USE ONLY)	FIELD CODE	CONTAINERS Volume/Amount	MATRIX	PRESERVATIVE METHOD	SAMPLING TIME	DATE OTHER	ICP HNO3	HCL	CHLORIDE SULFATE AIR SOIL	PROJECT NAME:		
										Yates Pet	Sampled Signature: <i>Jean Johnson</i>	
32929	Laction SB-2 13-15'	1	WATER	WATER	X	10/20/13/05	X	X	X	Total Metals Ag As Bi Cd Cr Pb Hg Se	TCLP Volatiles	
32930	Laction SB-2 20-21'	1			X					BTEX 81121/5030	TCLP Semi Volatiles	
32931	Laction SB-3 12.5-14.5	1			X					TPH 411-8015-060/670	RCI	
32932	Laction SB-4 13-15'	1			X					CALOR IDE		
32933	Laction SB-5 13-15'	1			X							
32934	Laction SB-6 14-16'	1			X							
32935	Laction SB-2 47'	4.5			X							
32936	Laction Back ground	1			X							
32937	Williams SB-1 10-12'	1			X							
32938	Williams SB-2 10-12'	1			X							
32939	Williams SB-3 10-12'	1			X							
REMARKS												
Brought by: <i>Jean Johnson</i>		Date:	Received by: <i>Jean Johnson</i>		Time:		Remarks: J. Murray					
Relinquished by: <i>Jean Johnson</i>		Date:	Received by: 		Time:							
Relinquished by: 		Date:	Received by Laboratory: 		Time:							

Environmental Lab of Texas, Inc. 12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

AND ANALYSIS REQUEST
C.O.C. #264

Nov 02 00 05:10p

p. 9

ANALYSIS REQUEST							
Project Manager:		3044					
Company Name & Address:		JESSE THAYER					
Project #:		STC-2540 W. Meadow St 10835 Act 88299					
FAX #:		397-4704					
Project Location:							
VATES PET		<i>Jesse Thayer</i>					
Supplier Signature:							
LAB #	(LAB USE) ONLY	FIELD CODE	# CONTAINERS		PRESERVATIVE METHOD	TIME	REMARKS
			MATRIX	VOLUME/AMOUNT			
32940	Williams	SB-4	17-16'	1	X	10/21/09/11	
32941	Williams	SB-5	10-12'	1	X	09/30	
32942	Williams	SB-5	17-19'	1	X	09/30	
32943	Williams	SB-5	24-26'	1	X	10/25	
32944	Williams	SB-5	30'	4	X	10/22	
32945	Scripps	SB-1	18.5-20.5'	1	X	12/4/0	
32946	Scripps	SB-2	9-10'	1	X	13/6/0	
32947	Scripps	SB-2	30-33'	1	X	14/3/0	
32948	Scripps	SB-2	35-37'	1	X	15/3/0	
32949	Scripps	SB-2	39-41'	1	X		
32950	Scripps	SB-2	40'	4	X	16/5/0	
Reinstituted by:				Received by:			
<i>Jesse Thayer</i>				<i>J. McMurtry</i>			
Reinquished by:				Received by:			
<i>Jesse Thayer</i>				<i>J. McMurtry</i>			
Reinstituted by:				Received by:			
<i>Jesse Thayer</i>				<i>J. McMurtry</i>			
Reinquished by:				Received by:			
<i>Jesse Thayer</i>				<i>J. McMurtry</i>			
Date:		Date:		Date:		Date:	
23 Oct 00		14/05		Times:		Times:	
Time:		Time:		Time:		Time:	
Time:		Time:		Time:		Time:	
Time:		Time:		Time:		Time:	

Environmental Lab of Texas, Inc. 12600 West I-20 East Odessa, Texas 79763
 (915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST
 COC # 264

Project Manager:

Jesse Taylor

Company Name & Address:

ETI 2540 West Marland, Hobbs, NM

Project Name:

YPC - 2000 D

Project ID#:

Project Location:

Carter City, NMPhone #: 397-4770/
FAX #: 397-4770/ANALYSIS REQUEST
 45f 4

ANALYSIS REQUEST

LAB # (LAB USE) ONLY	FIELD CODE	CONTAINERS	VOLUME/AMOUNT	MATRIX	PRESERVATIVE	METHOD	TIME	DATE	ICP HNO3 HCL SLUDGE AIR WATER OTHER	RCI	Chlorides		
											TCLP Metals	Total Metals	TCLP Semi-Volatile Metals
32951	Williams, Background	1	4oz	X	X		10/21/0748						
32952	Scrippi, Background	1	4oz	X	X		10/21/1250						

Received by:	Date:	Time:	Remarks:
<u>Jesse Taylor</u>	23 OCT 00	1405	Rec 1°C
Rec'd by:			
Retrn'd by:	Date:	Time:	Received by Laboratory:

APPENDIX C

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: <input type="text" value="18S"/>	Range: <input type="text" value="26E"/>	Sections: <input type="text" value="23"/>
NAD27 X: <input type="text"/>	Y: <input type="text"/>	Zone: <input type="text"/> Search Radius: <input type="text"/>
County: <input type="text"/> ED	Basin: <input type="text"/> Number: <input type="text"/>	Suffix: <input type="text"/>
Owner Name: (First) <input type="text"/>	(Last) <input type="text"/>	<input type="checkbox"/> Non-Domestic <input type="checkbox"/> Domestic <input checked="" type="radio"/> All
<input type="button" value="Well Data Report"/> <input type="button" value="Avg Depth to Water Report"/> <input type="button" value="WATERS Menu"/> <input type="button" value="Help"/>		<input type="button" value="Water Column Report"/>

WELL DATA REPORT 11/15/2000

(acre ft per annum)

DB File Nbr	Use	Diversions	Owner
RA 01296	IRR	9666	CHARLES R. MARTIN
RA 02132	IRR	3	JONNIE GOODEN & PAUL E ROGERS
RA 05344	PRO	60	YATES PETROLEUM CORP

(quarters are biggest to smallest X Y are
 Well Number Tws Rng Sec q q Zone
 RA 01296 18S 26E 23 1 3 0
 RA 01296 CLW 18S 26E 23 1 3 2
 RA 01296 COR 18S 26E 23 3 1 1
 RA 01296 DRY 2 18S 26E 23 1 1 0
 RA 01296 SUP 18S 26E 23 3 1 1
 RA 01296 SUP 2 18S 26E 23 1 1 3
 RA 02132 CLW-2 18S 26E 23 2 1 1
 RA 05344 (1C) 18S 26E 23 4 4 0

Record Count: 8

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 01296

Primary Purpose: IRR IRRIGATION

Primary Status: PMT Permit

Total Acres: 644.4

Total Diversions: 9666

Owner: CHARLES R. MARTIN

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
CPU	10/29/1969	PMT	APR	CNV	CONVERSION	RA	012 T	644.4	9666	

Point of Diversion

POD Number	Source	Tws	Rng	Sec	q	q	q	X	Y	UTM are in Meters
RA 01296	Shallow	18S	26E	23	1	3	0	13	560098	I 3621901
RA 01296	CLW	18S	26E	23	1	3	2	13	560197	32 4 3622000
RA 01296	COR	18S	26E	23	3	1	1	13	559998	32 4 3621596
RA 01296	DRY	18S	26E	23	1	1	0	13	560097	32 4 3622305
RA 01296	DRY 2	18S	26E	23	1	1	0	13	560097	32 4 3622305
RA 01296	SUP	18S	26E	23	3	1	1	13	559998	32 4 3621596
RA 01296	SUP 2	18S	26E	23	1	1	3	13	559996	32 4 3622204

Place of Use

Tws	Rng	Sec	q	q	q	Acres	Diversion	Consumptive	Use	Priority	Status	Other Location Description
18S	26E	14	106	318								
18S	26E	15	233.5	700.5								
18S	26E	23	304.9	914.7								
												01/01/1935

(quarters are biggest to smallest
(quarters are biggest to smallest

New Mexico Office of the State Engineer
Transaction Summary

[Back](#)

CPPU Change Place & Purpose of Use (Ground)

Trn_nbr: 106247 Trn_desc: CONVERSIO N RA 01296 File Date: 09/25/1969

Primary status: PMT Permit

Secondary status: APR Approved

Person assigned:

Applicant: CHARLES R. MARTIN

Events

Date Type Description

09/25/1969 CNV Converted from Main Frame

DB_File_Nbr

RA 01296

Acres Diversion Consumptive Purpose of Use

644.4 9666 IRR IRRIGATION

Processed BY
informix Ortega, Mercedes

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 01296	18S	26E	23	1	3	0		

Driller Licence:

Driller Name: R. L. WILLSON

Drill Start Date: 11/01/1938

Log File Date:

Pump Type:

Casing Size:

Depth Well: 158

Source: Shallow

Drill Finish Date: 01/26/1939

PCW Received Date: 12/16/1939

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 01296 CLW	18S	26E	23	1	3	2		

Driller Licence: 28 SMITH, A.F.

Driller Name:

Drill Start Date: 03/16/1954

Log File Date: 04/12/1954

Pump Type: TURBIN

Casing Size:

Depth Well: 150

Source: Shallow

Drill Finish Date: 03/18/1954

PCW Received Date: 10/05/1955

Pipe Discharge Size:

Estimated Yield:

Depth Water: 35

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 01296 COR	18S	26E	23	3	1	1		

Driller Licence:

Driller Name: D. N. GRAY

Drill Start Date:

Log File Date:

Pump Type: TURBIN

Casing Size:

Depth Well: 150

Source: Shallow
Drill Finish Date: 04/01/1943
PCW Received Date: 08/28/1944
Pipe Discharge Size:
Estimated Yield:
Depth Water: 70

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

POD Number	Tw	Rng	Sec	q	q	Zone	x	y
RA 01296 DRY	18S	26E	23	1	1	0		

Driller Licence:

Driller Name: R. L. WILLSON

Drill Start Date: 09/24/1935

Log File Date: 02/10/1959

Pump Type:

Casing Size:

Depth Well: 212

Source:

Drill Finish Date: 10/01/1935

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	X	Y
RA 01296 DRY 2	18S	26E	23	1	1	0		

Driller Licence:

Driller Name: R. L. WILLSON
Drill Start Date: 03/01/1939
Log File Date: 02/10/1959
Pump Type:
Casing Size:
Depth Well:

Source:
Drill Finish Date: 03/30/1939
PCW Received Date:
Pipe Discharge Size:
Estimated Yield:
Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 01296 SUP	185	26E	23	3	1	1		

Driller Licence:

Driller Name: D. N. GRAY

Drill Start Date:

Log File Date:

Pump Type: TURBIN

Casing Size:

Depth Well: 154

Source: Shallow

Drill Finish Date: 04/01/1943

PCW Received Date: 08/21/1943

Pipe Discharge Size:

Estimated Yield:

Depth Water: 110

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	g	Zone	x	y
RA 01296 SUP 2	18S	26E	23	1	1	3		

Driller Licence:

Driller Name: DAVE GRAY

Drill Start Date:

Log File Date:

Pump Type: ROTARY

Casing Size:

Depth Well: 135

Source: Shallow

Drill Finish Date: 02/01/1948

PCW Received Date: 08/12/1948

Pipe Discharge Size:

Estimated Yield:

Depth Water: 100

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 02132 CLW-2
Primary Purpose: IRR IRRIGATION
Primary Status: ADJ Adjudicated

Total Acres: 254.9

Total Diversion: 3

Owner: JONNIE GOODEN & PAUL E ROGERS

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
APPRO	03/21/1959	ADJ ADJ CNV				CONVERSATION	RA 021 T	254.9		3

Point of Diversion

POD Number	(qtr are biggest to smallest)	X	Y	are in Feet	UTM are in Meters)
RA 02132 CLW-2	Source	Tws	Rng	Sec q q q	UTM Zone
	Shallow	18S	26E	23 2 1 1	13 560798 3622405

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132 CLW-2	18S	26E	23	2	1	1		

Driller Licence:

Driller Name: A.F. SMITH

Drill Start Date:

Log File Date:

Pump Type: TURBIN

Casing Size:

Depth Well: 200

Source: Shallow

Drill Finish Date: 01/08/1955

PCW Received Date: 08/15/1955

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Water Right Summary

Back

DB File Nbr: RA 05344

Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE

Primary Status: PMT Permit

Total Acres:

Total Diversions: 60

Owner: YATES PETROLEUM CORP

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
CLWPU	01/31/1989	PMT APR CNV	CONVERSION	RA	053	T		60		

Point of Diversion (qtr are biggest to smallest)

POD Number	Source	Tws	Rng	Sec	q	q	q	X	Y	UTM are in Meters		
										UTM Zone	Easting	Northing
RA 05344	Shallow	18S	25E	26	4	0				13	551065	3618474
RA 05344	(1A)	18S	25E	35	0	0				13	550782	3619349
RA 05344	(1)	18S	25E	26	3	4				13	558699	3619680
RA 05344	(1B)	18S	26E	27	3	0	0			13	560501	3620690
RA 05344	(1C)	18S	26E	23	4	0				13	551065	3618474
RA 05344	(1D)	18S	25E	35	0	0				13	551065	3618474
RA 05344	(2)	18S	25E	35	0	0				13	553894	3618066
RA 05344	(2A)	18S	26E	31	3	0	0			13	549450	3618477
RA 05344	(2B)	18S	25E	34	0	0				13	549450	3618477
RA 05344	(2C)	18S	25E	34	0	0				13	551075	3621665
RA 05344	(3)	18S	25E	23	0	0				13		

Place of Use (quarters are biggest to smallest)

Tws	Rng	Sec	q	q	q	q	Acres	Diversion	Consumptive	Use	Priority	Status	Other Location Description
00							05/22/1967						

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 05344 (1C)	18S	26E	23	4	4	0		

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Well Reports and Downloads

Township:	<input type="text" value="18S"/>	Range:	<input type="text" value="26E"/>	Sections:	<input type="text" value="24"/>
NAD27 X:	<input type="text"/>	Y:	<input type="text"/>	Zone:	<input type="text"/> ▼ <input type="button" value="Search Radius"/>
County:	<input type="text"/> ▼ ED	Basin:	<input type="text"/> ▼	Number:	<input type="text"/>
Owner Name:	<input type="text"/> (First) <input type="text"/> (Last)		<input type="checkbox"/> Non-Domestic <input type="checkbox"/> Domestic <input checked="" type="checkbox"/> All	Suffix: <input type="text"/>	
<input type="button" value="Well Data Report"/> <input type="button" value="Avg Depth to Water Report"/> <input type="button" value="WATERS Menu"/>		<input type="button" value="Water Column Report"/> <input type="button" value="Help"/>			

WELL DATA REPORT 11/15/2000

(acre ft per annum)

DB File Nbr	Use	Diversions	Owner	Owner
RA_ 02132	IRR	3	TERRY & JAMIE MARIE SANDERS	
RA_ 02132 B				
RA_ 02132 B REPAR				
RA_ 02132 B S				
RA_ 02132 CLW				
RA_ 02132 REPAR				
RA_ 02132 B-2 REPAR				
RA_ 03409 REPAR				
RA_ 03900				

RA_ 02132 B-2 PRO
RA_ 03409 REPAR DOM
RA_ 03900 DOM

ANOCO PROD. CO.
3 SANDERS TERRY
3 PAUL & JOHNNIE ROGERS

(quarters are biggest to smallest X Y are
Well Number Tws Rng Sec q q q Zone

RA_ 02132	18S	26E	24	2	4	1
RA_ 02132 B	18S	26E	24	1	4	2
RA_ 02132 B REPAR	18S	26E	24	1	2	3
RA_ 02132 B S	18S	26E	24	1	2	2
RA_ 02132 CLW	18S	26E	24	1	4	1
RA_ 02132 REPAR	18S	26E	24	2	4	1
RA_ 02132 B-2 REPAR	18S	26E	24	1	2	3
RA_ 03409 REPAR	18S	26E	24	2	4	2
RA_ 03900	18S	26E	24	1	3	1

Record Count: 9

New Mexico Office of the State Engineer
Water Right Summary

[Back]

DB File Nbr: RA 02132
 Primary Purpose: IRR IRRIGATION
 Primary Status: ADJ Adjudicated
 Total Acres: 4.7
 Total Diversion: 3
 Owner: R.G. GOODEN
 Owner: TERRY & JAMIE MARIE SANDERS

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
APPRO	05/05/1958	ADJ ADJ CNV	CONVERSION	RA	021	T	4.7	3		

Point of Diversion

POD Number	Source	Tws	Rng	Sec	q	q	q	X	Y	UTM are in Meters		
										UTM Zone	Easting	Northing
RA 02132	Shallow	18S	26E	24	2	4	1			13	562804	362005
RA 02132 B	Shallow	18S	26E	24	1	4	2			13	562201	3622003
RA 02132 B REPAR	Shallow	18S	26E	24	1	2	3			13	562000	3622207
RA 02132 BS	Shallow	18S	26E	24	1	2	2			13	562200	3622407
RA 02132 CLW	Shallow	18S	26E	24	1	4	1			13	562001	3622003
RA 02132 REPAR	Shallow	18S	26E	24	2	4	1			13	562804	3622005

Place of Use

Tws	Rng	Sec	q	q	q	Acres	Diversion	Consumptive	Use	Priority	Status	Other Location Description
18S	26E	23				146.5	439.5			01/01/1908		
18S	26E	23				39.75	119.25			01/01/1908		
18S	26E	24				63.8	191.4			01/01/1925		
18S	26E	24				3.5	10.5			01/01/1925		

New Mexico Office of the State Engineer
Transaction Summary

[Back](#)

APPRO Application to Appropriate

Trn_nbr: 107254 Trn_desc: CONVERSION RA: 02132 File Date: 05/05/1958

Primary status: ADJ Adjudicated

Secondary status: ADJ

Person assigned:

Applicant: R. G. GOODEN

Applicant: TERRY & JAMIE MARIE SANDERS

Events

Date	Type	Description	Comment
05/05/1958	CNV	Converted from Main Frame	

DB File Nbr	Acres	Diversions	Consumptive	Purpose of Use
RA 02132	4.7	3		IRR IRRIGATION

Processed By
informix Ortega, Mercedes

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132	18S	26E	24	2	4	1		

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source: Shallow

Drill Finish Date: 01/01/1912

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	zone	x	y
RA 02132 B	185	26E	24	1	4	2		

Driller Licence:

Driller Name: D.N. GRAY
Drill Start Date: 12/06/1952
Log File Date: 01/06/1953
Pump Type: TURBIN
Casing Size:
Depth Well: 166

Source: Shallow
Drill Finish Date: 12/17/1952
PCW Received Date: 02/08/1955
Pipe Discharge Size:
Estimated Yield:
Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

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POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132 B REPAR	18S	26E	24	1	2	3		

Driller Licence: 28 SMITH, A.F.

Driller Name: A.F. SMITH

Drill Start Date: 12/03/1953

Log File Date: 12/23/1953

Pump Type:

Casing Size:

Depth Well: 140

Source: Shallow

Drill Finish Date: 12/04/1953

PCW Received Date: 02/08/1955

Pipe Discharge Size:

Estimated Yield:

Depth Water: 27

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Twp	Rng	Sec	q	q	Zone	x	y
RA 02132 BS	18S	26E	24	1	2	2		

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type: TURBIN

Casing Size:

Depth Well: 105

Source: Shallow

Drill Finish Date: 01/01/1938

PCW Received Date: 02/08/1955

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132 CLW	18S	26E	24	1	4	1		

Driller Licence:

Driller Name: D.N. GRAY
Drill Start Date: 12/06/1952
Log File Date: 01/06/1953
Pump Type:
Casing Size:
Depth Well: 166

Source: Shallow
Drill Finish Date: 12/17/1952
PCW Received Date:
Pipe Discharge Size:
Estimated Yield:
Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132 REPAR	18S	26E	24	2	4	1		

Driller Licence:

Driller Name: R.I. WILLSON

Drill Start Date:

Log File Date: 01/06/1953

Pump Type: TURBIN

Casing Size:

Depth Well: 60

Source:
Drill Finish Date: 03/01/1936
PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Water Right Summary

Back

DB File Nbr: RA 02132 B-2

Primary Purpose: PRO 72-12-1 PROSPECTING OR DEVELOPMENT OF NATURAL RESOURCE

Primary Status: EXP Expired

Total Acres:

Total Diversion:

Owner: ANOCO PROD. CO.

Documents on File

Doc File/Act Status 1 2 3 Trans Desc

APPRO 07/24/1980 EXP EXP CNV CONVERSION

From/To

RA 021 T

UTM are in Meters)	UTM Zone	Easting	Northing	Consumptive
I	13	562000	3622207	32 4

Point of Diversion (qtr are biggest to smallest X Y are in Feet

POD Number	Source	Tws	Rng	Sec	q q	Zone	X	Y
RA 02132 B-2 REPAR	Shallow	18S	26E	24	1 2 3			

New Mexico Office of the State Engineer
Point of Diversion Summary

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POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 02132 B-2 REPAR	18S	26E	2 4	1	2	3		

Driller Licence: 28 SMITH, A.F.

Driller Name: A.F. SMITH

Drill Start Date: 12/08/1953

Log File Date: 01/11/1954

Pump Type: TURBIN

Casing Size:

Depth Well: 105

Source: Shallow

Drill Finish Date: 12/10/1953

PCW Received Date: 02/08/1955

Pipe Discharge Size:

Estimated Yield:

Depth Water: 27

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 03409 REPAR

Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
Primary Status: PMT Permit

Total Acres:

Total Diversions: 3

Owner: SANDERS TERRY

Documents on File

Doc	File/Act	Status	1	2	3	Trans_Desc	From/To	Acres	Diversions	Consumptive
72121	01/31/1956	PMT APR CNV	CONVERSION	RA	034 T			3		

Point of Diversion (qtr are biggest to smallest)

POD Number	Source	Tws	Ring	Sec	q	q	Zone	X	Y	UTM are in Meters)
RA 03409 REPAR	Shallow	18S	26E	24	2	4	2			UTM Zone 13

I

32

4

3

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number Tws Rng Sec q q
RA 03409 REPAR 18S 26E 24 2 4 2

Driller Licence: 28 SMITH, A.F.

Driller Name: SMITH, A.F.

Drill Start Date: 02/13/1956

Log File Date: 02/27/1956

Pump Type: Casing Size:

Casing Size: 175
Depth Well: 175

Source: Shallow
Drill Finish Date: 02/21/1956

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 18

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 03900

Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD

Primary Status: PMT Permit

Total Acres:

Total Diversion: 3

Owner: PAUL & JOHNNIE ROGERS

Documents on File

Doc	File/Act	Status	1	2	3	Trans_Desc	From/To	Acres	Diversion	Consumptive
72121	07/17/1958	PMT	APR	CNV	CONVERSION	RA	039 T		3	

Point of Diversion

POD Number	Source	Tws	Rng	Sec	q	q	Zone	X	Y	UTM are in Meters)
RA 03900	Artesian	18S	26E	24	1	3	1			UTM Zone 13

(qtr are biggest to smallest X Y are in Feet

UTM Zone	Easting	Northing	I
13	561600	3622003	32 4

New Mexico Office of the State Engineer
Point of Diversion Summary

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POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 03900	18S	26E	24	1	3	1		

Driller Licence: 28 SMITH, A.F.

Driller Name: Source: Artesian
Drill Start Date: 07/17/1958 Drill Finish Date: 08/08/1958
Log File Date: 08/11/1958 PCW Received Date:
Pump Type: Pipe Discharge Size:
Casing Size: Estimated Yield:
Depth Well: 845 Depth Water: 90

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

[Well Data Report](#) [Avg Depth to Water Report](#) [Water Column Report](#)

[Clear Form](#) [WATERS Menu](#) [Help](#)

WELL DATA REPORT 11/15/2000

(acre ft per annum)
DB File Nbr Use Diversion Owner

No Records found, try again

(quarters are biggest to smallest X Y are
Well Number Tws Rng Sec q q q Zone

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: <input type="text" value="18S"/>	Range: <input type="text" value="26E"/>	Sections: <input type="text" value="26"/>
NAD27 X: <input type="text"/>	Y: <input type="text"/>	Zone: <input type="text"/> Search Radius: <input type="text"/>
County: <input type="text"/> ▶	Basin: <input type="text"/> ▶	Number: <input type="text"/> Suffix: <input type="text"/>
Owner Name: (First) <input type="text"/> (Last) <input type="text"/>		<input type="checkbox"/> Non-Domestic <input checked="" type="checkbox"/> Domestic <input checked="" type="checkbox"/> All
Well Data Report Avg Depth to Water Report WATERS Menu Help		Water Column Report

WELL DATA REPORT 11/15/2000

(acre ft per annum)

DB File Nbr	Use	Diversion	Owner
RA_01881	OBS		BASSETT & BIRNEY ET AL
RA_07242	-EXPL	DOM	HUBERT C. GREEN
RA_07242	EXPL	OBS	HUBERT C. GREEN
RA_07243	-EXPL	DOM	HUBERT C. GREEN
RA_07243	EXPL	DOM	HUBERT C. GREEN

Record Count: 5

(quarters are biggest to smallest X Y are Zone)					
	Well Number	Tws	Rng	Sec	q q q
RA_01881		18S	26E	26	3 3 0
RA_07242	-EXPL	18S	26E	26	4 3
RA_07242	EXPL	18S	26E	26	4 3
RA_07243	-EXPL	18S	26E	26	4 3
RA_07243	EXPL	18S	26E	26	4 3

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 01881

Primary Purpose: OBS OBSERVATION

Primary Status: EXP Expired

Total Acres:

Total Diversion:

Owner: BASSETT & BIRNEY ET AL

Documents on File

Doc	File/Act	Status	1	2	3	trans_Desc	From/To	Acres	Diversion	Consumptive
72121	01/27/1942	EXP EXP CNV	CONVERSION	RA	018	T				

Point of Diversion (qtr are biggest to smallest X Y are in Feet)

POD Number	Source	Tws	Rng	Sec	q	q	Zone	X	Y	UTM are in Meters)
RA 01881		18S	26E	26	3	3	0			UTM Zone 13

RA 560105

3619478

32 4

I

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 01881	18S	26E	26	3	3	0		

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Water Right Summary

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DB File Nbr: RA 07242 -EXPL

Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
Primary Status: PMT Permit

Total Acres:

Total Diversion: 3

Owner: HUBERT C. GREEN

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
72121	09/15/1983	PMT APR CNV	CONVERSION	RA	072 T			3		

Point of Diversion (qtrs are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	Zone	X	Y	UTM are in Meters)
RA 07242 -EXPL	18S	26E	26	4	3				UTM Zone 13

UTM Zone 13

Easting

Northing

I

3619479

32

4

560908

New Mexico Office of the State Engineer
Point of Diversion Summary

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POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 07242 -EXPL	18S	26E	26	4	3			

Driller Licence: 749 HUGHES, SAMUEL DALE

Driller Name: KUGHES DRILLING COMPANY

Drill Start Date: 09/20/1983

Log File Date: 11/08/1983

Pump Type:

Casing Size:

Depth Well: 102

Source: Shallow

Drill Finish Date: 10/30/1983

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 55

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 07242 EXPL

Primary Purpose: OBS OBSERVATION
Primary Status: FMT Permit

Total Acres:

Total Diversion:

Owner: HUBERT C. GREEN

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
EXPL	09/15/1983	PMT APR CNV	CONVERSION	RA	072	T				

Point of Diversion

POD Number	Source	Tws	Rng	Sec	q	q	Zone	X	Y	UTM are in Meters
RA 07242 EXPL	Shallow	18S	26E	26	4	3				UTM Zone 13 Easting 560908 Northing 3619479 I 32 4

(qtr are biggest to smallest X Y are in Feet

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number Tws Rng sec q q Zone x y
RA 07242 EXPL 18S 26E 26 4 3

Driller Licence: 749 HUGHES, SAMUEL DALE

Driller Name: Drill Start Date: 09/20/1983 Drill Finish Date: 10/30/1983

Log File Date: 11/08/1983 PCW Received Date:

Pump Type: Pipe Discharge Size:

Casing Size: Estimated Yield:

Depth Well: 102 Depth Water: 55

New Mexico Office of the State Engineer
Water Right Summary

[Back](#)

DB File Nbr: RA 07243 -EXPL
Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
Primary Status: PMT Permit

Total Acres:

Total Diversions: 3

Owner: HUBERT C. GREEN

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversions	Consumptive
72121	09/15/1983	PMT	APR	CNV	CONVERSATION	RA	072 T	3		

Point of Diversion

POD Number	Source	Tws	Rng	Sec	q	q	q	X	Y	UTM are in Meters
RA 07243 -EXPL	Shallow	18S	26E	26	4	3				UTM Zone
										Easting
										Northing
										I
										3619479
										32 4
										560908

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tws	Rng	Sec	q	q	Zone	x	y
RA 07243 -EXPL	18S	26E	26	4	3			

Driller Licence: 749 HUGHES, SAMUEL DALE

Driller Name: HUGHES DRILLING COMPANY

Drill Start Date: 07/01/1984

Log File Date: 07/27/1984

Pump Type:

Casing Size:

Depth Well: 110

Source: Shallow

Drill Finish Date: 07/25/1984

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 50

New Mexico Office of the State Engineer
Water Right Summary

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DB File Nbr: RA 07243 EXPL
Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
Primary Status: PMT Permit
Total Acres: 3
Total Diversion: 3
Owner: HUBERT C. GREEN

Documents on File

Doc	File/Act	Status	1	2	3	Trans Desc	From/To	Acres	Diversion	Consumptive
72121	09/15/1983	PMT APR CNV	CONVERSION	RA	072	T		3		

Point of Diversion (qtr are biggest to smallest X Y are in Feet)
POD Number Source Tws Rng Sec q q Zone X Y UTM are in Meters)
RA 07243 EXPL Shallow 18S 26E 26 4 3 13 560908 3619479 32 4

New Mexico Office of the State Engineer
Point of Diversion Summary

[Back](#)

POD Number	Tw	Rng	Sec	q	q	Zone	x	y
RA 07243 EXPL	18S	26E	26	4	3			

Driller Licence: 749 HUGHES, SAMUEL DALE

Driller Name:

Drill Start Date: 07/01/1984

Log File Date: 07/27/1984

Pump Type:

Casing size:

Depth Well: 110

Source: Shallow

Drill Finish Date: 07/25/1984

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 50

APPENDIX D

