AP - 023

STAGE 1 & 2 REPORTS

DATE: June 2003

AP-23

PRELIMINARY SITE INVESTIGATION REPORT

FORMER LATTION PIT LOCATION
NE ¼ of the SW ¼ of Section 23, Township 18 South, Range 26 East
Eddy County, New Mexico

Prepared For:

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

RECEIVED
FEB 25 2004
Oil Conservation Division
Environmental Bureau

ETGI Project # YP2218

Prepared By:
Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, New Mexico 88240

June 2003

Robert B. Eidson
Geologist / Project Manager

Chance Johnson
New Mexico Regional Manager

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1.0 INTRODUCTION

Yates Petroleum Corporation (YATES) is submitting this Preliminary Site Investigation Report as a summary of activities completed to date at the former Lattion Pit site in Eddy County, New Mexico. The regulatory basis for site characterization actions conducted at this site is the August 1993 New Mexico Oil Conservation Division (NMOCD) *Guidelines for Remediation of Leaks, Spills, and Releases* and the February 1993 NMOCD document *Unlined Surface Impoundment Closure Guidelines*. Data collected during this subsurface investigation is suitable for use in any subsequent Stage II Abatement Plan. The site is located in the NE ¼ of the SW ¼ of Section 23, Township 18 South, Range 26 East in Eddy County, New Mexico. The surface expression of the former pit area measures approximately 200 feet by 280 feet. The immediate area and region is dominated by petroleum exploration and production facilities. For reference, a site location and site map are provided as Figures 1 and 2, respectively.

Site characterization action was conducted to assess subsurface soil and groundwater conditions associated with oil and gas exploration and production activities by the former responsible party operating the site. Environmental Technology Group, Inc. (ETGI) had previously conducted subsurface soil and groundwater characterization action at the site on 20 October 2000. Refer to the Preliminary Site Investigation Report, November 2000 for details of the previous site characterization action. Laboratory analysis of soil and groundwater samples collected during this previous investigation indicated that groundwater underlying the former pit area had been impacted with dissolved phase benzene and chlorides in excess of NMOCD standards.

2.0 SUMMARY OF FIELD ACTIVITIES

ETGI mobilized a hollow-stem auger drilling rig on 3 September and 4 September 2002 to conduct a preliminary site investigation and determine the nature and extent of dissolved phase benzene and chloride concentrations present in the groundwater in the former pit area. ETGI advanced a total of four soil borings, subsequently converted to permanent groundwater monitor wells, to depths varying between approximately 55 to 70 feet, which was the prevailing depth to sufficiently assess the potential for groundwater impact. The monitor wells were developed utilizing a single use disposable Teflon bailer until a minimum of three well volumes had been removed and groundwater temperature, pH and conductivity parameters had stabilized. Approximately 24 hours after well development, the monitor wells were purged of three well volumes, again monitoring the purged groundwater for temperature, pH and conductivity parameters, allowed to recharge a minimum of 80 percent of the original well volume and sampled for dissolved phase Benzene, Toluene, Ethylbenzene and Xylene (BTEX) constituent concentrations, chlorides and Total Dissolved Solids (TDS).

3.0 SITE DESCRIPTION

3.1 Regional Geology/Hydrogeology

In the site vicinity, the surface is composed of Quaternary alluvium associated with Pecos River flood plain deposits originating from the Sacramento Mountains to the west. The

alluvium is underlain by the Triassic age Dockum Group formation that 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 unconformably overly the Upper Permian Rustler Formation (gypsum, redbeds and dolomites) which unconformably overly the Middle Permian Chalk Bluff Formation (back reef deposits of dolomite, evaporites, redbeds and sandstone).

NO!

The site 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, groundwater commonly occurs in the alluvium near the Pecos River and in the Permian formations throughout the feature. These aquifers are typically characterized by relatively high hydraulic conductivity and transmissivity. Aquifers within the Triassic Dockum group are usually thin and discontinuous resulting in poor water quality and low well yields.

In the site vicinity, groundwater generally flows to the southeast toward the west channel of the Pecos River, which joins the main channel at the confluence of Brantley Reservoir. The east-west trending intermittent streams in the area appear to have little influence on the region hydraulic gradient, however local variations may occur in the vicinity of these drainage features 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 from June to October, inclusive. Infiltration from these events is minimal given the high rate of surface runoff and evaporation. The Quaternary alluvium consists of clay, silt, sand, gravel and conglomerate in the near surface area. The thickness of the alluvium ranges from a thin veneer in the west to greater than 300 feet in places just west of the Pecos River. Groundwater in the alluvium originates from the cumulative effects of five sources: local precipitation, surface water, losses from leaky artesian wells, natural leakage of artesian water from the underlying artesian aquifers and irrigation return. The amount of water from each source is variable and indeterminate but, it has been concluded that the majority of the shallow groundwater supply is derived directly or indirectly from the artesian supply through natural leakage and that contributions from direct precipitation and surface runoff contribute as only a minor part of the total recharge. Movement of the shallow groundwater is primarily to the east toward the Pecos River channel where it discharges. The occurrence of shallow groundwater discharging into tributary streams of the Pecos River takes place where the channel beds are cut below the water table; therefore, groundwater locally moves toward those channels. There are a considerable number of shallow irrigation wells introducing artificial discharge into the area, which has locally altered the movement of shallow groundwater, inducing it to flow to the wells.

3.2 Site Geology/Hydrology

Review of the analytical results and soil boring/monitor well details from previous site investigation indicate that backfill materials are present to a depth of approximately 12 feet

bgs in the former pit area. Native, undisturbed soils including sandy clay units, a thin sandy gravel stringer, soft to stiff clay units and a silty sand unit were encountered underlying the former pit area. Unconsolidated silty sands and sandy clay units are present on the surface areas surrounding the former pit area. The sands are characterized as yellowish brown to grayish orange, very fine grained, well-sorted alluvial deposits. The clay and sandy clay units are characterized as light to yellowish brown and reddish brown, and moderately soft to stiff. Thin discontinuous gravely units are located irregularly at varying depths to the east and below the former pit area.

Groundwater was encountered at depths varying from approximately 52 to 57 feet bgs during drilling activities. Following monitor well development, gauging measurements indicate that the depth to stabilized groundwater levels vary from approximately 35 to 60 feet bgs indicating the presence of a perched water feature in the area of monitor well MW-1 (Table 1). Monitor well MW-1 is positioned near the northern site boundary line that is shared with a frequently watered agricultural development. Groundwater levels observed in this well can be attributed to shallow seepage inflow from the adjacent agricultural development. Monitor well MW-4 is positioned near the center of the former pit area, as determined from observations made on-site. Groundwater elevations observed in monitor well MW-4 is attributed to a local perched water unit located within the former pit structure. Gauging data from monitor well MW-4 was not utilized in the construction of the site groundwater gradient map for this reason. The inferred groundwater gradient on-site as measured between monitor wells MW-1 and MW-2 slopes to the southeast with a magnitude of 0.078 feet per foot.

3.3 New Mexico Oil Conservation Division (NMOCD) Soil Classification

Based on the following data: depth to groundwater varying between 25 to 52 feet below the deepest known concentration of regulated contaminants, the nearest surface water body being greater than 1,000 feet away, and the distance of the nearest water well head being greater than 1,000 feet away, according to the NMOCD ranking system (NMOCD, 1993), the site can be assigned a ranking of greater than 19 points. Therefore, the preliminary action levels are 100 mg/kg for TPH, 50 mg/kg for total BTEX, and 10 mg/kg for benzene in soils. Based on TDS concentrations of less than 10,000 mg/L the groundwater is considered to be of foreseeable beneficial use and must meet New Mexico Water Quality Control Commission (WQCC) standards for each contaminant to qualify for site closure.

3.4 Distribution of Hydrocarbons in the Unsaturated Zone

To date, five soil borings have been advanced and four groundwater monitor wells have been installed at the site to characterize the potential impact to the site from the former pit area. There were no detectable concentrations of TPH or BTEX constituents in the soil samples collected during the installation of monitor wells MW-1, MW-2, MW-3 or MW-4.

Chloride concentrations recorded from analysis of the soil samples collected from monitor well MW- 1 at depths of approximately 35, 58 and 70 feet bgs registered 390 mg/kg, 35.4 mg/kg and less than 20 mg/kg, respectively. Chloride concentrations recorded from analysis of the soil samples collected from monitor well MW- 2 at depths of approximately 25, 55 and

70 feet bgs registered 74.6 mg/kg, 106 mg/kg and 35.4 mg/kg, respectively. Chloride concentrations recorded from analysis of the soil samples collected from monitor well MW- 3 at depths of approximately 15, 35 and 65 feet bgs registered 177 mg/kg, 382 mg/kg and less than 20 mg/kg, respectively. Chloride concentrations recorded from analysis of the soil samples collected from monitor well MW- 4 at depths of approximately 20, 45 and 55 feet bgs registered 2,390 mg/kg, 213 mg/kg and less than 20 mg/kg, respectively (Table 2). Analyses of the laboratory results indicate that only the sample collected from the center of the former pit area significantly exceeded the WQCC regulatory standard for chloride of site background concentration plus 250 mg/kg. The chloride concentration recorded from analysis of the soil sample collected from monitor well MW-4 at a depth of approximately 45 feet bgs registered 213 mg/kg which is below the regulatory standard and also represents a tenfold reduction from the approximate pit bottom soil sample results. Results of the laboratory analysis of soil sampling conducted during monitor well installation activities are included in Table 2 and laboratory reports generated from sampling conducted during monitor well installation activities are included as Appendix B.

The distribution of hydrocarbons in the unsaturated zone has been estimated by utilizing the following techniques:

- Visual observations of subsurface soil samples;
- Review of field screening data; and
- Laboratory analyses of selected soil samples.

3.5 Distribution of Hydrocarbons in the Saturated Zone

ETGI advanced a total of four soil borings, which were subsequently converted, to permanent groundwater monitor wells, to total depths varying from 55 to 75 feet bgs, to assess the potential for groundwater impact. Monitor well MW-1 was located in a relative up gradient position, monitor wells Mw-2 and MW-3 were positioned in apparent down gradient locations relative to the former pit area and the fourth monitor well was located near the center of the former pit area as determined by on-site observations. Groundwater samples were collected and analyzed for BTEX, chlorides and TDS constituents to determine if the water meets the NMOCD definition of reasonably foreseeable beneficial use (i.e. less than or equal to 10,000 mg/L TDS). Groundwater samples were submitted under a completed chain-of-custody and analyzed for required analyts by the methods listed below:

- BTEX constituents using EPA Method SW 846-8021B, 5030;
- Total Dissolved Solids (TDS) using EPA Method SW 846-160.1; and
- Chlorides using EPA Method SW 846-9253.

Analysis of the groundwater samples collected from these monitor wells indicate that the on-site groundwater has not been impacted with dissolved phase BTEX constituents. Review of the laboratory results from chloride analysis of groundwater samples collected indicates that on-site groundwater has not been significantly impacted by operations conducted at the former pit site. The groundwater sample registering the highest chloride concentration

recorded was collected from the up gradient monitor well MW-1. A summary of all groundwater analytical results is provided in Table 3.

4.0 FOLLOW-UP ACTIVITIES

Review of the field data and the analytical results generated from soil sampling activities conducted during this Preliminary Site Investigation indicate that no hydrocarbon impacted soil is present in the areas investigated surrounding and within the former pit area. Review of the analytical results generated from groundwater sampling activities conducted indicate that no BTEX constituents are present in the groundwater above the method detection levels. The maximum chloride concentration observed in the groundwater samples collected during this investigation were recorded from the up gradient monitor well, MW-1. The lowest chloride concentration recorded from analysis of groundwater samples collected during this investigation was recorded at the monitor well immediately down gradient of the former pit area. Analysis of this data indicates that the former pit area does not appear to be adversely impacting groundwater in the site area. Upon approval from YATES, ETGI will prepare a formal pit closure report as outlined in the NMOCD Environmental Handbook Section publication *Unlined Surface Impoundment Closure Guidelines* (February 1993).

Once site closure approval is received, the on-site monitor wells will be plugged and abandoned according to accepted NMOCD policies. A final report documenting monitor well plugging and abandonment activities will be submitted to the NMOCD upon completion of site activities.

5.0 QA/QC PROCEDURES

5.1 Soil Sampling

Samples of subsurface soils were obtained utilizing a five-foot continuous sampling device using clean, disposable gloves and clean sampling tools. One half of each sample was placed into a labeled zip-lock baggie and exposed to sunlight and ambient temperature for a minimum of thirty minutes prior to field screening with a photoionization detector (PID) calibrated to a 100 ppm isobutylene standard. Soil samples selected for laboratory analysis were sealed in an insulated cooler on ice under completed chain-of custody and transported to the Environmental Laboratory of Texas in Odessa, Texas for the requested 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 Odessa, Texas for BTEX, TPH and chloride analyses using the methods described below. All soil samples were analyzed within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA SW 846 Method 8021B, 5030;
- TPH concentrations in accordance with modified EPA SW 846 Method 8015M GRO/DRO and,
- Chloride concentrations in accordance with EPA SW846 Method 9253

5.2 Groundwater Sampling

Monitor wells were developed and purged with single-use, disposable Teflon bailer. Monitor wells with sufficient recharge were purged by removing a minimum of three well volumes. Monitor wells that did not recharge sufficiently were purged until no additional groundwater could be obtained.

After purging the wells, groundwater samples were collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. Groundwater sample containers were filled in the order of decreasing volatilization sensitivity (i.e., BTEX containers filled first and chloride containers second).

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

Groundwater samples, collected for TDS analysis, were filled to capacity in sterile, Amber, 1-liter glass containers equipped with Teflon-lined caps. Groundwater samples, collected for chloride analysis, were filled to capacity in sterile, 500-ml plastic containers equipped with Teflon-lined caps preserved with nitric acid. The analytical laboratory provided all containers and preservatives.

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 groundwater samples were analyzed as follows:

- BTEX concentrations in accordance with EPA SW 846 Methods 8021B, 5030
- TDS concentrations in accordance with EPA SW 846 Method 160.1
- Chloride concentrations in accordance with EPA SW 846 Method 9253

5.3 Decontamination Of Equipment

In general, the cleaning procedures consisted of using high pressure steam to wash the drilling and sampling equipment prior to drilling. Prior to use, the sampling equipment was cleaned with Liqui-Nox® 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 Site 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 the Yates Petroleum Corporation. 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 Corporation.

7.0 REFERENCES

Title 19 NMAC 15.A.19;

Guidelines for Remediation of Leaks, Spills and Releases; August 1993 (NMOCD, 1993);

Unlined Surface Impoundment Closure Guidelines; February 1993 (NMOCD, 1993); and

Geology and Ground-Water Resources of Eddy County, New Mexico; G. E. Hendrickson and R. S. Jones; United States Geological Survey, New Mexico State Bureau of Mines and Mineral Resources and the State Engineer of New Mexico, 1952.

8.0 DISTRIBUTION

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2540 W. Marland
Hobbs, New Mexico 88240

COPY NO.: 1

Pat Capleton
Quality Control Reviewer

TABLES

TABLE 1

GROUND WATER ELEVATION DATA

YATES PETROLEUM
FORMER LATTION PIT SITE
EDDY COUNTY, NEW MEXICO
ETGI PROJECT # YA 2218

WELL NUMBER	DATE MEASURED	TOP OF CASING ELEVATION	DEPTH TO PRODUCT	DEPTH TO WATER	PSH THICKNESS	CORRECTED GROUND WATER ELEVATION
MW - 1	09/18/02	3,309.05	-	34.42	0.00	3,274.63
	09/19/02	3,309.05	-	34.54	0.00	3,274.51
MW - 2	09/18/02	3,307.92	-	61.40	0.00	3,246.52
	09/19/02	3,307.92	-	61.65	0.00	3,246.27
MW - 3	09/18/02	3,307.90	-	55.08	0.00	3,252.82
	09/19/02	3,307.90	-	58.73	0.00	3,249.17
MW - 4	09/18/02	3,307.63	-	38.17	0.00	3,269.46
	09/19/02	3,307.63	-	38.23	0.00	3,269.40

TABLE 2

CONCENTRATIONS OF BTEX, CHLORIDES AND TPH IN SOIL

YATES PETROLEUM CORPORATION
FORMER LATTION PIT SITE
EDDY COUNTY, NEW MEXICO
ETGI Project # YA 2218

All concentrations are in mg/kg

SAMPLE NAME	SAMPLE DATE	SAMPLE DEPTH	SW 846-8021B, 5030				Method: 9253	Method: 8015	
			BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	CHLORIDES	GRO	DRO
MW-1	09/03/02	35'	<0.025	<0.025	<0.025	<0.025	390	<10.0	<10.0
	09/03/02	58'	<0.025	<0.025	<0.025	<0.025	35.4	<10.0	<10.0
	09/03/02	70'	<0.025	<0.025	<0.025	<0.025	<20.0	<10.0	<10.0
MW-2	09/03/02	25'	<0.025	<0.025	<0.025	<0.025	74.6	<10.0	<10.0
	09/03/02	55'	<0.025	<0.025	<0.025	<0.025	106	<10.0	<10.0
	09/03/02	70'	<0.025	<0.025	<0.025	<0.025	35.4	<10.0	<10.0
MW-3	09/03/02	15'	<0.025	<0.025	<0.025	<0.025	177	<10.0	<10.0
	09/03/02	35'	<0.025	<0.025	<0.025	<0.025	382	<10.0	<10.0
	09/03/02	65'	<0.025	<0.025	<0.025	<0.025	<20.0	<10.0	<10.0
MW-4	09/03/02	20'	<0.025	<0.025	<0.025	<0.025	2390	<10.0	<10.0
	09/03/02	45'	<0.025	<0.025	<0.025	<0.025	213	<10.0	<10.0
	09/04/02	55'	<0.025	<0.025	<0.025	<0.025	<20.0	<10.0	<10.0

TABLE 3

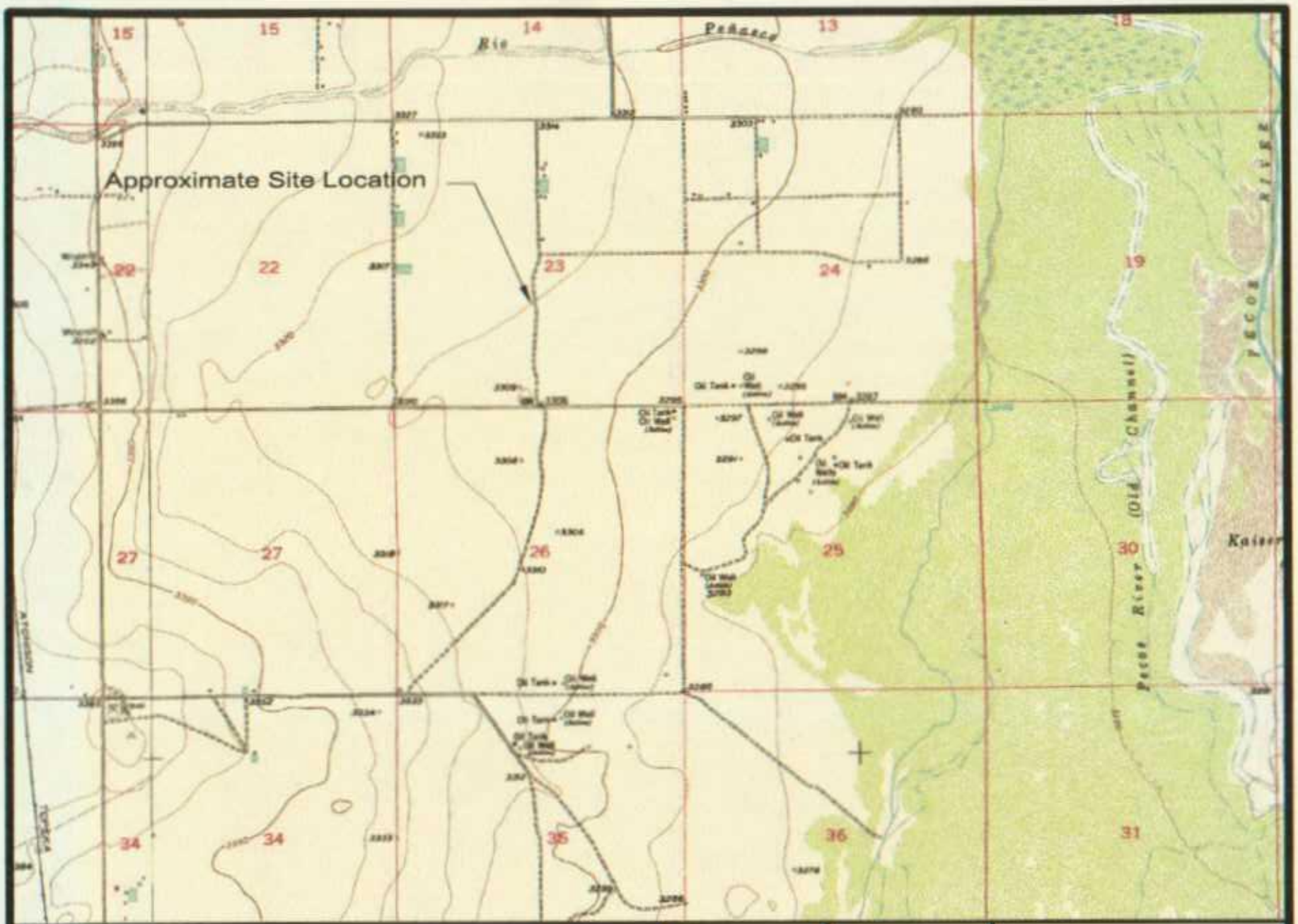
CONCENTRATIONS OF BTEX, CHLORIDES AND TDS IN GROUNDWATER

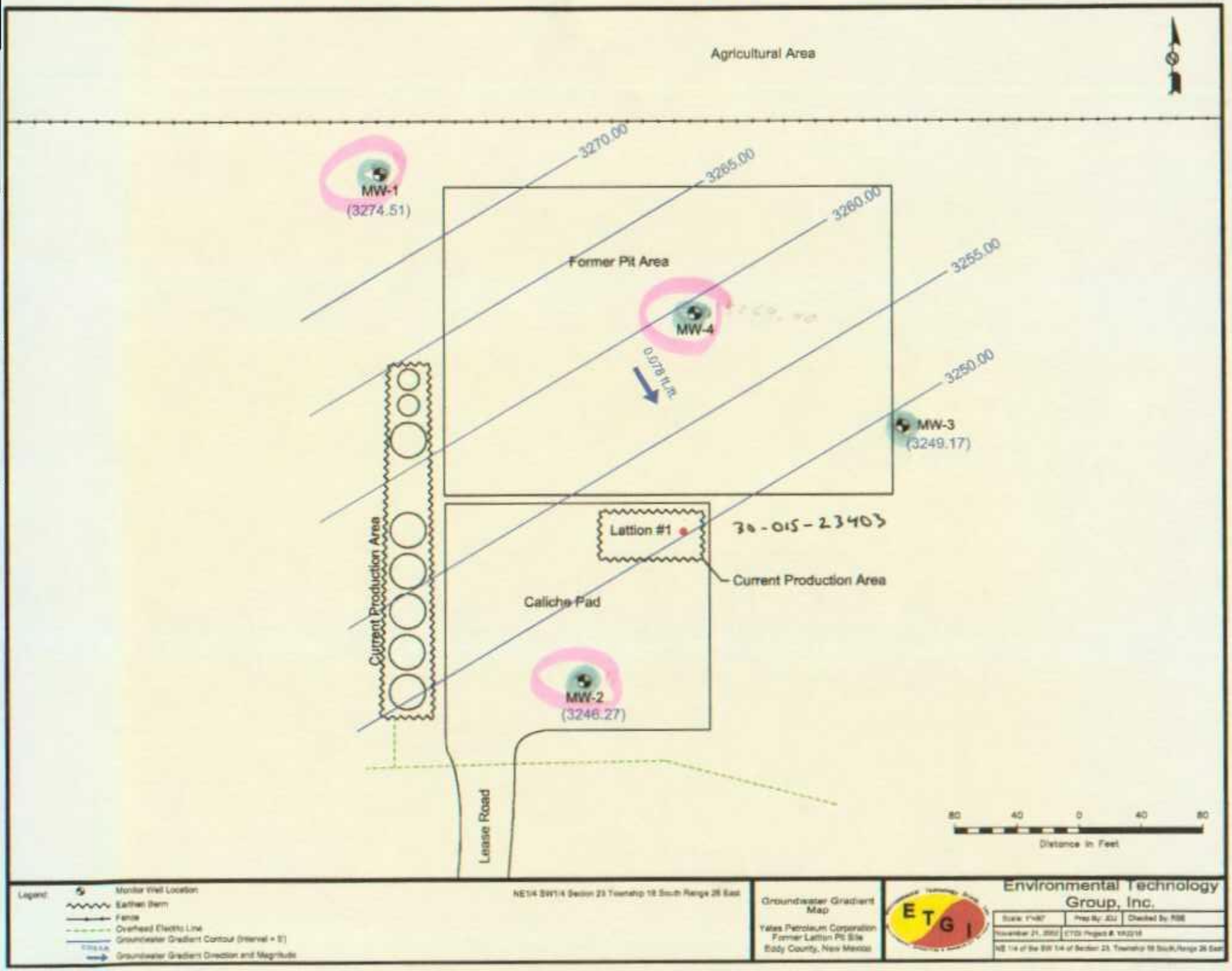
YATES PETROLEUM CORPORATION
FORMER LATTION PIT SITE
EDDY COUNTY , NEW MEXICO
ETGI PROJECT # YA 2218

All concentrations are in mg/L

SAMPLE LOCATION	SAMPLE DATE	SW 846-8021B, 5030				Method:9253	Method:160.1
		BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	CHLORIDES	TDS
MW - 1	09/19/02	<0.001	<0.001	<0.001	<0.001	1770	6140
MW - 2	09/19/02	<0.001	<0.001	<0.001	<0.001	709	3420
MW - 3	09/19/02	<0.001	<0.001	<0.001	<0.001	59.1	1700
MW - 4	09/19/02	<0.001	<0.001	<0.001	<0.001	1280	5350

FIGURES


Approximate Site Location
NE1/4 SW1/4 Section 23 Township 18 South Range 26 East
Figure 1
Site Location Map
Yates Petroleum Corp.
Former Laltion Pit Site
Artesia, NM
Environmental Technology Group, Inc.


Agricultural Area
3270.00
3265.00
3260.00
3255.00
3250.00
MW-1
(3274.51)
Former Pit Area
MW-4
0.0078 ft./ft.
MW-3
(3249.17)
Lattion #1
30-015-23403
Current Production Area
Caliche Pad
Current Production Area
MW-2
(3246.27)
Lease Road
80
40
0
40
80
Distance In Feet
Legend:
Monitor Well Location
Earthen Berm
Fence
Overhead Electric Line
Groundwater Gradient Contour (Interval = 5')
Groundwater Gradient Direction and Magnitude
NE1/4 SW1/4 Section 23 Township 18 South Range 26 East
Groundwater Gradient Map
Yates Petroleum Corporation
Former Lattion Pit Site
Eddy County, New Mexico
ETGI
Environmental Technology Group, Inc.
Scale: 1"=80'
Prep By: JDJ
Checked By: RBE
November 21, 2002
ETGI Project #: YA0218
NE 1/4 of the SW 1/4 of Section 23, Township 18 South, Range 26 East

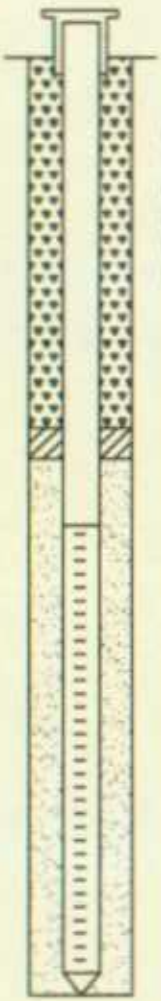
APPENDICES

Appendix A

Soil Boring Logs

Monitoring Well MW - 1

Depth (feet)	Soil Column	PID Reading	Odor	Stain	Notes
0					
5		2.1	Strong	Heavy	
10		1.5	Strong	Heavy	
15		1.1	Strong	Heavy	
20		1.4	None	None	
25		0.8	None	Minor	
30		0.9	None	Trace	
35		(1.6)	None	None	
40		1.3	None	None	
45		1.6	None	None	
50		1.8	None	None	
55	▼	2.5	None	None	Damp
60		(1.9)	None	None	Damp
65		1.5	None	None	Wet
70	TD	(0.6)	None	None	Damp
75					



Monitoring Well Details

Date Drilled	9 - 3 - 02
Thickness of Bentonite Seal	3 ft
Length of PVC Well Screen	35 ft
Depth of PVC Well	70 ft
Depth of Exploratory Well	70 ft
Depth to Ground Water	57 ft

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Legend

- Silty Sand - (SM) - Grayish Orange, Very Fine Grained, Well Sorted, Dry, Loose.
- Silty Sand - (SM) - Grayish Orange, Very Fine to Fine Grained, Sub-Angular, Loose.
- Sand - (SP) - Very Pale Orange to Grayish Orange, Very Fine to Fine Grained, Loose.
- Sandy Gravel - (GP) - Moderate Yellow to Pale Yellowish-Orange, Moderately Sorted, Dry.
- Clay - (CL) - Moderate Greenish-Yellow, Soft, Dry.
- Sandy Clay - (SC) - Pale Greenish Yellow, Moderate Soft to Firm, Damp.
- Clay - (CL) - Yellowish Gray, Slightly Sandy, Slightly Fractured, Soft to Medium Firm, Damp.
- Clay - (CL) - Medium Dark Gray, Moderate Firm, Slightly Damp.
- Clay - (CL) - Medium Gray and Moderate Greenish Yellow, Soft to Stiff, Damp.
- Clay - (CL) - Dark Gray, Stiff, Dry.
- Clay - (CL) - Medium Dark Gray, Medium Soft, Slightly Damp.
- Gravel - (GP) - Dark Yellowish Brown, Very Poorly Sorted, Fine to Cobble Sized, Slightly Sandy, Wet.
- Clay - (CL) - Medium Dark Gray, Medium Soft, Slightly Damp.

(1.6) Indicates samples selected for laboratory analysis.

▼ Indicates the ground water level measured on date.

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

Completion Notes

1. The monitoring well was installed on date using hollow stem auger drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is protected with a locked stick up steel cover and a compression cap.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from the ground surface.

Boring Log And Monitoring Well Detail

Monitoring Well - 1

Yates Petroleum. Former Lattion Pit Site Eddy County, NM

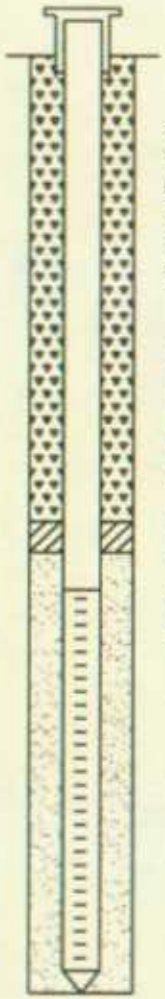
Environmental Technology Group, Inc.

Scale: use scale	Prep By: LGM	Checked By: RE
Oct. 17, 2002	ETGI Project # YA2218	

NE 1/4 of the SW 1/4 of Section 23, Township 18 South,Range 28 East

Monitoring Well MW - 2

Depth (feet)	PID Reading	Odor	Stain	Notes
0				
5	2.7	None	None	
10	1.1	None	None	
15	0.9	None	None	
20	0.7	None	None	
25	(0.7)	None	None	
30	0.5	None	None	
35	0.5	None	None	
40	0.5	None	None	
45	0.6	None	None	
50	1.5	None	None	
55	(1.3)	None	None	
60	1.4	None	None	
65	1.2	None	None	
70 TD	(1.1)	None	None	Wet
75				



Monitoring Well Details

Date Drilled	9 - 3 - 02
Thickness of Bentonite Seal	3 ft
Length of PVC Well Screen	30 ft
Depth of PVC Well	70 ft
Depth of Exploratory Well	70 ft
Depth to Ground Water	61 ft

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Legend

Sandy Clay - (SC) - Moderate Yellowish-Brown, Soft to Medium Soft.

Sandy Clay - (SC) - Dark Yellowish Orange, Soft, Dry.

Sandy Clay - (CL) - Dark Yellowish Orange, Soft Dry, Imbedded Caliche.

Sandy Clay - (OL) - Grayish Orange, Very Stiff, Dry.

Sandy Clay - (OL) - Light Brown, Stiff, Dry.

Clay - (CL) - Very Pale Orange, Medium Soft, Dry.

Clay - (CL) - Yellowish Gray, Medium Soft, Dry.

Clay - (CL) - Light Brown, Soft, Course Sand to Fine Gravel, Chert, Clasts Imbedded in Clay, Wet.

( ) Indicates samples selected for laboratory analysis.

Indicates the ground water level measured on date.

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

Completion Notes

1. The monitoring well was installed on date using hollow stem auger drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is protected with a locked stick up steel cover and a compression cap.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from the ground surface.

Boring Log And Monitoring Well Detail

Monitoring Well - 2

Yates Petroleum. Former Lattion Pit Site Eddy County, NM

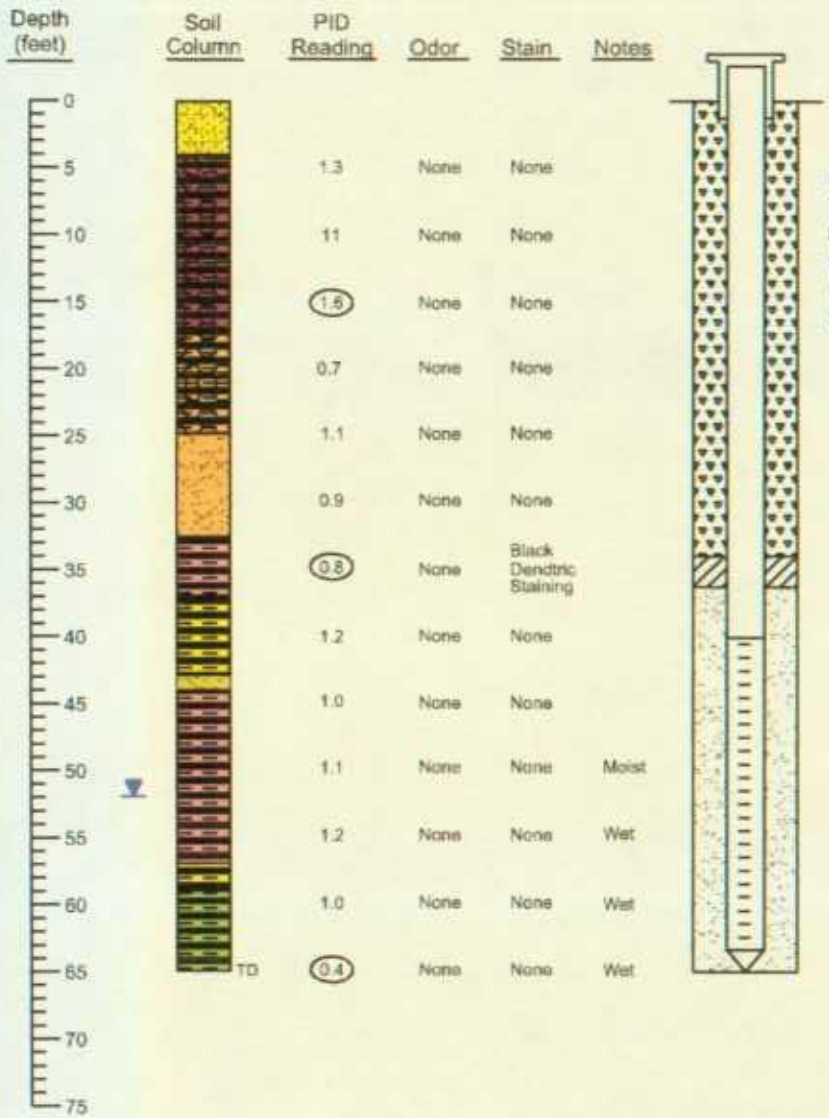
ETGI

Environmental Technology Group, Inc.

Scale: use scale	Prep By: LGM	Checked By: RE
Oct. 17, 2002	ETGI Project # YA2218	

NE 1/4 of the SW 1/4 of Section 23, Township 18 South,Range 28 East

Monitoring Well MW - 3



Monitoring Well Details

Date Drilled	9 - 4 - 02
Thickness of Bentonite Seal	3 ft
Length of PVC Well Screen	25 ft
Depth of PVC Well	65 ft
Depth of Exploratory Well	65 ft
Depth to Ground Water	52 ft

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Legend

Silty Sand - (SM) - Dark Yellowish-Orange, Very Fine Grained, Loose.

Sandy Clay - (SM) - Moderate Brown, Soft, Imbedded Caliche, With Sandy Veins.

Sandy Clay - (CL) - Grayish Orange, Medium Soft to Stiff, Sporatic Caliche Filled Veins.

Sand - (SP) - Grayish Orange to Very Pale Orange, Very Fine to Fine Grained, Loose, Dry.

Clay - (OL) - Light Olive to Grayish Olive, Stiff, Slickenside, Slightly Sandy.

Clay - (OL) - Dark Yellowish Orange, Moderate Stiff, Sand to Gravel Sized Qtz and Chert Imbedded.

Silty Sand - (SM) - Very Pale Orange, Very Fine Grained, Well Sorted, Loose.

Clay - (CL) -Light Olive to Light Olive Brown, Medium Soft to Stiff, Wet.

Sandy Clay - (CL) -Dark Yellowish Orange and Grayish Olive Green, Modrately Soft, Wet.

Clay - (CL) -Dark Yellowish Brown, Very Soft, Wet.

Indicates samples selected for laboratory analysis.

Indicates the ground water level measured on date.

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

Completion Notes

1. The monitoring well was installed on date using hollow stem auger drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is protected with a locked stick up steel cover and a compression cap.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from the ground surface.

Boring Log And Monitoring Well Detail

Monitoring Well - 3

Yates Petroleum. Former Lattion Pit Site Eddy County, NM

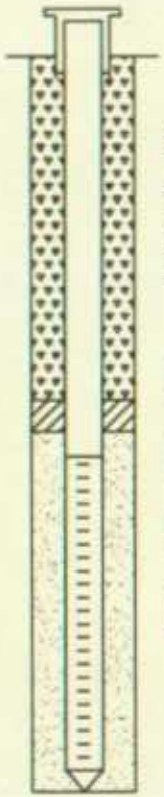
Environmental Technology Group, Inc.

Scale: use scale	Prep By: LGM	Checked By: RE
Oct. 17, 2002	ETGI Project # YA2218	

NE 1/4 of the SW 1/4 of Section 23, Township 18 South,Range 26 East

Monitoring Well MW - 4

Depth (feet)	Soil Column	PID Reading	Odor	Stain	Notes
5		1.1	None	None	
10		0.8	None	None	
15		0.6	None	None	
20		(0.5)	None	None	
25		0.3	None	Slight	
30		0.5	None	None	
35		0.8	None	None	
40		0.4	None	None	Moist
45		(3.3)	None	None	Wet
50		0.9	None	None	Wet
55	TD	(0.1)	None	None	Wet



Monitoring Well Details

Date Drilled	9 - 4 - 02
Thickness of Bentonite Seal	3 ft
Length of PVC Well Screen	25 ft
Depth of PVC Well	55 ft
Depth of Exploratory Well	55 ft
Depth to Ground Water	45 ft

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen

Legend

- Sandy Clay - (SM) - Grayish-Orange to Dark Orange, Soft, Backfill Material.
- Sandy Clay - (SM) - Moderate Brown, Soft, Backfill, Material.
- Sandy Gravel - (GP) - Grayish Orange, Medium Sand to course Gravel, Backfill Material.
- Sandy Clay - (SC) - Moderate Orange Pink, Moderate Soft to Stiff.
- Sandy Gravel - (OL) - Grayish Orange, Fine Gravel.
- Sandy Clay - (OL) - Dark Yellowish Orange, Soft.
- Clay - (OL) - Pale Greenish Yellow, Stiff.
- Clay - (CL) - Light Olive to Light Olive Brown, Medium Soft to Stiff.
- Sandy Gravel - (GP) -Very Pale Orange, Fine Sand to Course Gravel.
- Clay - (CL) -Pale Yellowish Brown to Moderate Brown, Stiff to Medium Soft.
- Clay - (CL) - Pale Greenish Yellow and Pale Yellowish Orange, Medium Soft, Damp.
- Sandy Clay - (SC) - Light Olive Brown to Very Pale Orange, Soft, Gravelly, Wet.
- Clay - (ML) - Grayish Olive Green, Dry, Stiff.

(○) Indicates samples selected for laboratory analysis.

▼ Indicates the ground water level measured on date.

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

Completion Notes

1. The monitoring well was installed on date using hollow stem auger drilling techniques.
2. The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
3. The well is protected with a locked stick up steel cover and a compression cap.
4. The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
5. The depths indicated are referenced from the ground surface.

Boring Log And Monitoring Well Detail

Monitoring Well - 4

Yates Petroleum. Former Lattion Pit Site Eddy County, NM

ETGI

Environmental Technology Group, Inc.

Scale: use scale	Prep By: LGM	Checked By: RE
Oct. 17, 2002	ETGI Project # YA2218	

NE 1/4 of the SW 1/4 of Section 23, Township 18 South, Range 26 East

Appendix B

Laboratory Reports

ANALYTICAL REPORT

Prepared for:

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Project:	Yates Petroleum
PO#:	YA-2200
Order#:	G0204449
Report Date:	09/12/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242
505-394-4701

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0204449-01	Williams MW-1 15'	SOIL	8/28/02 10:16	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-02	Williams MW-1 25'	SOIL	8/28/02 10:34	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-03	Williams MW-1 30'	SOIL	8/28/02 10:50	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-04	Williams MW-2 20'	SOIL	8/28/02 16:22	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-05	Williams MW-2 30'	SOIL	8/28/02 16:51	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-06	Lattion MW-1 35'	SOIL	9/3/02 9:59	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: 0.5 C		

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242
505-394-4701

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
	8021B/5030 BTEX Chloride					
0204449-07	Lattion MW-1 58'	SOIL	9/3/02 12:11	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing:	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX Chloride					
0204449-08	Lattion MW-1 70'	SOIL	9/3/02 13:15	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing:	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX Chloride					
0204449-09	Lattion MW-2 25'	SOIL	9/3/02 17:12	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing:	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX Chloride					
0204449-10	Lattion MW-2 55'	SOIL	9/4/02 8:01	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing:	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX Chloride					
0204449-11	Lattion MW-2 70'	SOIL	9/4/02 8:55	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing:	Rejected: No		Temp: 0.5 C		
	8015M 8021B/5030 BTEX Chloride					

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242
505-394-4701

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0204449-12	Lattion MW-3 15'	SOIL	9/4/02 10:45	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-13	Lattion MW-3 35'	SOIL	9/4/02 11:26	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-14	Lattion MW-3 65'	SOIL	9/5/02 12:22	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-15	Lattion MW-4 20'	SOIL	9/4/02 15:34	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-16	Lattion MW-4 45	SOIL	9/5/02 7:57	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M, 8021B/5030 BTEX, Chloride	Rejected: No		Temp: 0.5 C		
0204449-17	Lattion MW-4 55'	SOIL	9/5/02 9:00	9/6/02 12:30	4 oz Glass	Ice
	Lab Testing: 8015M	Rejected: No		Temp: 0.5 C		

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-06
Sample ID: Lattion MW-1 35'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/6/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003097-02		9/10/02 12:13	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	103%	80	120
Bromofluorobenzene	107%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-07
Sample ID: Lattion MW-1 58'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/6/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003097-02		9/10/02 12:35	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	103%	80	120
Bromofluorobenzene	106%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-08
Sample ID: Lattion MW-1 70'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 17:36	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	92%	80	120
Bromofluorobenzene	102%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-09
Sample ID: Lattion MW-2 25'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 17:58	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	95%	80	120
Bromofluorobenzene	104%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-10
Sample ID: Lattion MW-2 55'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 18:20	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	96%	80	120
Bromofluorobenzene	99%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: C0204449
Project:
Project Name: Yates Petrolcum
Location: Artesia, NM

Lab ID: 0204449-11
Sample ID: *Lattion MW-2 70'*

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 18:42	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	86%	80	120
Bromofluorobenzene	98%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-12
Sample ID: Lattion MW-3 15'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 19:05	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	85%	80	120
Bromofluorobenzene	101%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-13
Sample ID: Lattion MW-3 35'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 19:26	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	100%	80	120
Bromofluorobenzene	104%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-14
Sample ID: Lattion MW-3 65'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 19:49	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	106%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: *G0204449*
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-15
Sample ID: Lattion MW-4 20'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 20:11	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	103%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-16
Sample ID: Lattion MW-4 45

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/10/02 20:33	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	92%	80	120
Bromofluorobenzene	103%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-17
Sample ID: Lattion MW-4 55'

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		9/7/02	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	<10.0	10.0
DRO, >C12-C35	<10.0	10.0
TOTAL, C6-C35	<10.0	10.0

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003104-02		9/11/02 10:23	1	25	CK	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Ethylbenzene	<0.025	0.025
Toluene	<0.025	0.025
p/m-Xylene	<0.025	0.025
o-Xylene	<0.025	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	108%	80	120
Bromofluorobenzene	108%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-01
Sample ID: Williams MW-1 15'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	851	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-02
Sample ID: Williams MW-1 25'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	6760	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-03
Sample ID: Williams MW-1 30'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	7270	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-04
Sample ID: Williams MW-2 20'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	5940	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-05
Sample ID: Williams MW-2 30'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	14100	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-06
Sample ID: Lattion MW-1 35'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	390	mg/kg	1	20	9253	9/11/02	SB

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-07
Sample ID: Lattion MW-1 58'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	35.4	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-08
Sample ID: Lattion MW-1 70'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	<20.0	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-09
Sample ID: Lattion MW-2 25'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	74.6	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-10
Sample ID: Lattion MW-2 55'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	106	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-11
Sample ID: Lattion MW-2 70'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	35.4	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-12
Sample ID: Lattion MW-3 15'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	177	mg/kg	1	20	9253	9/11/02	SB

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

Robert Eidson
Environmental Technology Group, Inc.
2540 West Marland
Hobbs, NM 88242

Order#: G0204449
Project:
Project Name: Yates Petroleum
Location: Artesia, NM

Lab ID: 0204449-13
Sample ID: Lattion MW-3 35'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	382	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-14
Sample ID: Lattion MW-3 65'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	<20.0	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-15
Sample ID: Lattion MW-4 20'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	2390	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-16
Sample ID: Lattion MW-4 45

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	213	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-17
Sample ID: Lattion MW-4 55'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	<20.0	mg/kg	1	20	9253	9/11/02	SB

Lab ID: 0204449-18
Sample ID: Scripps MW-2 10'

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	1220	mg/kg	1	20	9253	9/11/02	SB

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8015M

Order#: G0204449

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003091-02			<10.0		
TOTAL, C6-C35-mg/kg	0003092-02			<10.0		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003091-03		952	859	90.2%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003091-04		952	847	89.%	1.4%
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0204449-08	0	952	828	87.%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0204449-08	0	952	867	91.1%	4.6%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg	0003091-05		1000	849	84.9%	
TOTAL, C6-C35-mg/kg	0003092-05		1000	862	86.2%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204449

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003097-02			<0.025		
Benzene-mg/kg	0003104-02			<0.025		
Benzene-mg/kg	0003116-02			<0.025		
Ethylbenzene-mg/kg	0003097-02			<0.025		
Ethylbenzene-mg/kg	0003104-02			<0.025		
Ethylbenzene-mg/kg	0003116-02			<0.025		
Toluene-mg/kg	0003097-02			<0.025		
Toluene-mg/kg	0003104-02			<0.025		
Toluene-mg/kg	0003116-02			<0.025		
p/m-Xylene-mg/kg	0003097-02			<0.025		
p/m-Xylene-mg/kg	0003104-02			<0.025		
p/m-Xylene-mg/kg	0003116-02			<0.025		
o-Xylene-mg/kg	0003097-02			<0.025		
o-Xylene-mg/kg	0003104-02			<0.025		
o-Xylene-mg/kg	0003116-02			<0.025		
CONTROL SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003104-03		0.1	0.085	85.%	
Ethylbenzene-mg/kg	0003104-03		0.1	0.086	86.%	
Toluene-mg/kg	0003104-03		0.1	0.086	86.%	
p/m-Xylene-mg/kg	0003104-03		0.2	0.178	89.%	
o-Xylene-mg/kg	0003104-03		0.1	0.086	86.%	
CONTROL DUP SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003104-04		0.1	0.087	87.%	2.3%
Ethylbenzene-mg/kg	0003104-04		0.1	0.089	89.%	3.4%
Toluene-mg/kg	0003104-04		0.1	0.090	90.%	4.5%
p/m-Xylene-mg/kg	0003104-04		0.2	0.185	92.5%	3.9%
o-Xylene-mg/kg	0003104-04		0.1	0.089	89.%	3.4%
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0204447-06	0	0.1	0.090	90.%	
Benzene-mg/kg	0204450-09	0	0.1	0.085	85.%	
Ethylbenzene-mg/kg	0204447-06	0	0.1	0.092	92.%	
Ethylbenzene-mg/kg	0204450-09	0	0.1	0.085	85.%	
Toluene-mg/kg	0204447-06	0	0.1	0.093	93.%	
Toluene-mg/kg	0204450-09	0	0.1	0.085	85.%	
p/m-Xylene-mg/kg	0204447-06	0	0.2	0.190	95.%	
p/m-Xylene-mg/kg	0204450-09	0	0.2	0.178	89.%	
o-Xylene-mg/kg	0204447-06	0	0.1	0.092	92.%	
o-Xylene-mg/kg	0204450-09	0	0.1	0.086	86.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0204447-06	0	0.1	0.087	87.%	3.4%
Benzene-mg/kg	0204450-09	0	0.1	0.087	87.%	2.3%
Ethylbenzene-mg/kg	0204447-06	0	0.1	0.089	89.%	3.3%
Ethylbenzene-mg/kg	0204450-09	0	0.1	0.090	90.%	5.7%
Toluene-mg/kg	0204447-06	0	0.1	0.089	89.%	4.4%
Toluene-mg/kg	0204450-09	0	0.1	0.089	89.%	4.6%
p/m-Xylene-mg/kg	0204447-06	0	0.2	0.184	92.%	3.2%
p/m-Xylene-mg/kg	0204450-09	0	0.2	0.186	93.%	4.4%
o-Xylene-mg/kg	0204447-06	0	0.1	0.089	89.%	3.3%
o-Xylene-mg/kg	0204450-09	0	0.1	0.091	91.%	5.6%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg	0003097-05		0.1	0.088	88.%	
Benzene-mg/kg	0003104-05		0.1	0.104	104.%	
Benzene-mg/kg	0003116-05		0.1	0.103	103.%	
Ethylbenzene-mg/kg	0003097-05		0.1	0.089	89.%	
Ethylbenzene-mg/kg	0003104-05		0.1	0.106	106.%	
Ethylbenzene-mg/kg	0003116-05		0.1	0.107	107.%	
Toluene-mg/kg	0003097-05		0.1	0.090	90.%	
Toluene-mg/kg	0003104-05		0.1	0.107	107.%	
Toluene-mg/kg	0003116-05		0.1	0.107	107.%	
p/m-Xylene-mg/kg	0003097-05		0.2	0.184	92.%	
p/m-Xylene-mg/kg	0003104-05		0.2	0.218	109.%	
p/m-Xylene-mg/kg	0003116-05		0.2	0.221	110.5%	
o-Xylene-mg/kg	0003097-05		0.1	0.089	89.%	
o-Xylene-mg/kg	0003104-05		0.1	0.104	104.%	
o-Xylene-mg/kg	0003116-05		0.1	0.107	107.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204449

BLANK SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0003111-01			<20.0		
Chloride-mg/kg	0003112-01			<20.0		
MS SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0204449-01	851	1000	1840	98.9%	
Chloride-mg/kg	0204449-21	390	1000	1400	101.%	
MSD SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0204449-01	851	1000	1830	97.9%	0.5%
Chloride-mg/kg	0204449-21	390	1000	1382	99.2%	1.3%
SRM SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/kg	0003111-04		5000	4960	99.2%	
Chloride-mg/kg	0003112-04		5000	4960	99.2%	

nvironmental Lab of Texas I, Ltd.

00 West I-20 East
essa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Eidson
Company Name: ETGT
Company Address: 2540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882 Fax No: (505) 397-4701
Sampler Signature: Robert Eidson

Project Name: Yates Petroleum
Project #: YA-2200
Project Loc: Artesia, NM
PO #:

B # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TPH: 418.1 (8015M) 1005 1006	TOTAL: Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, CO_3, HCO_3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	RUSH TAT (Pre-Schedule)	Standard TAT
	Williams MW-1 15'	8-28	10:16	1	X									X		X		X				X			
	Williams MW-1 25'	8-28	10:34																						
	Williams MW-1 30'	8-28	10:50																						
	Williams MW-2 20'	8-28	16:22																						
	Williams MW-2 30'	8-28	16:51																						
	Lattion MW-1 35'	9-3	09:59																						
	Lattion MW-1 58'	9-3	12:11																						
	Lattion MW-1 70'	9-3	13:15																						
	Lattion MW-2 25'	9-3	17:12																						
	Lattion MW-2 55'	9-4	08:01	↓	↓									↓		↓		↓				↓			

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
Rec 0.5°C

Relinquished by	Date	Time	Received by:	Date	Time
Robert Eidson	9-6-02	09:31		9-6-02	9:31
Relinquished by	Date	Time	Received by ELOT:	Date	Time
	9-6-02	12:35		9/06/02	12:30

Environmental Lab of Texas I, Ltd.

600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Eidson
Company Name: ETGI
Company Address: 9540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882 Fax No: (505) 397-4701
Sampler Signature: Robert Eidson

Project Name: Yates Petroleum
Project #: YA 2200
Project Loc: Artesia, NM
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TOTAL: (TPH) 418.1 (8015M)	1005	1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO_4, CO_3, HCO_3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	RUSH TAT (Pre-Schedule)	Standard TAT
	LAtHion MW-2 70'	9-4	08:55	1	X									X		X			X					X			
	LAtHion MW-3 15'	9-4	10:45																								
	LAtHion MW-3 35'	9-4	11:26																								
	LAtHion MW-3 65'	9-5	12:09																								
	LAtHion MW-4 20'	9-4	15:34																								
	LAtHion MW-4 45'	9-5	07:57																								
	LAtHion MW-4 55'	9-5	09:00																								
	Scripps MW-2 10'	8-30	09:48																								
	Scripps MW-2 85'	8-30	10:26																								
	Scripps MW-2 45'	8-30	11:12																								

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
rec 0.5°C

Relinquished by:	Date	Time	Received by:	Date	Time
Robert Eidson	9-6-02	0931		9-6-02	931
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
	9-6-02	12:35		9-6-02	1230

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Robert Eidson
Company Name: ETGI
Company Address: 2540 W. Marland
City/State/Zip: Hobbs, NM 88240
Telephone No: (505) 397-4882 Fax No: (505) 397-4701
Sampler Signature: Robert Eidson

Project Name: Yates Petroleum
Project #: YA 2200
Project Loc: Artesia, NM
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled (2002)	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP/TOTAL: TDS (CL) SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RUSH TAT (Pre-Schedule)	Standard TAT
	Scripps MW-3 15'	8-30	11:56	1	X									X		X			X				X		
	Scripps MW-3 30'	8-30	12:24																						
	Scripps MW-3 45'	8-30	12:54																						
	Scripps MW-4 10'	8-30	14:48																						
	Scripps MW-4 20'	8-30	15:04																						
	Scripps MW-4 42'	8-30	15:47																						

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
Rec 0.5°C

Relinquished by:	Date	Time	Received by:	Date	Time
Robert Eidson	9-6-02	6431		9-6-02	93
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
	9-6-02	12:35		9-6-02	1230

ANALYTICAL REPORT

Prepared for:

KEN DUTTON
E.T.G.I.
2540 WEST MARLAND
HOBBS, NM 88240

Project:	Lattion
PO#:	
Order#:	G0204572
Report Date:	09/30/2002

Certificates
US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

E.T.G.I.
2540 WEST MARLAND
HOBBS, NM 88240
505-397-4701

Order#: G0204572
Project: YA 2218
Project Name: Lattion
Location: Artesia, New Mexico

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0204572-01	MW 1	WATER	9/19/02 11:15	9/20/02 14:05	See COC	See COC
	Lab Testing:	**Rejected:** No		**Temp:** 3.0 C		
	8021B/5030 BTEX					
	Chloride					
	Total Dissolved Solids (TDS)					
0204572-02	MW 2	WATER	9/19/02 12:25	9/20/02 14:05	See COC	See COC
	Lab Testing:	**Rejected:** No		**Temp:** 3.0 C		
	8021B/5030 BTEX					
	Chloride					
	Total Dissolved Solids (TDS)					
0204572-03	MW 3	WATER	9/19/02 12:00	9/20/02 14:05	See COC	See COC
	Lab Testing:	**Rejected:** No		**Temp:** 3.0 C		
	8021B/5030 BTEX					
	Chloride					
	Total Dissolved Solids (TDS)					
0204572-04	MW 4	WATER	9/19/02 11:41	9/20/02 14:05	See COC	See COC
	Lab Testing:	**Rejected:** No		**Temp:** 3.0 C		
	8021B/5030 BTEX					
	Chloride					
	Total Dissolved Solids (TDS)					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

KEN DUTTON		Order#:	G0204572
E.T.G.I.		Project:	YA 2218
2540 WEST MARLAND		Project Name:	Lattion
HOBBS, NM 88240		Location:	Artesia, New Mexico

Lab ID: 0204572-01
Sample ID: MW 1

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003245-02		9/27/02 1:46	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	96%	80	120
Bromofluorobenzene	96%	80	120

Lab ID: 0204572-02
Sample ID: MW 2

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003245-02		9/27/02 2:08	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	93%	80	120
Bromofluorobenzene	92%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

KEN DUTTON		Order#:	G0204572
E.T.G.I.		Project:	YA 2218
2540 WEST MARLAND		Project Name:	Lattion
HOBBS, NM 88240		Location:	Artesia, New Mexico

Lab ID: 0204572-03
Sample ID: MW 3

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003245-02		9/27/02 2:30	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	94%	80	120
Bromofluorobenzene	95%	80	120

Lab ID: 0204572-04
Sample ID: MW 4

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0003245-02		9/27/02 2:53	1	1	CK	8021B

Parameter	Result mg/L	RL
Benzene	<0.001	0.001
Ethylbenzene	<0.001	0.001
Toluene	<0.001	0.001
p/m-Xylene	<0.001	0.001
o-Xylene	<0.001	0.001

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	97%	80	120
Bromofluorobenzene	99%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

KEN DUTTON		Order#:	G0204572
E.T.G.I.		Project:	YA 2218
2540 WEST MARLAND		Project Name:	Lattion
HOBBS, NM 88240		Location:	Artesia, New Mexico

Lab ID: 0204572-01
Sample ID: MW 1

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	1770	mg/L	1	5.00	9253	9/24/02	SB
Total Dissolved Solids (TDS)	6140	mg/L	1	5.0	160.1	9/25/02	TAL

Lab ID: 0204572-02
Sample ID: MW 2

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	709	mg/L	1	5.00	9253	9/24/02	SB
Total Dissolved Solids (TDS)	3420	mg/L	1	5.0	160.1	9/25/02	TAL

Lab ID: 0204572-03
Sample ID: MW 3

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	59.1	mg/L	1	5.00	9253	9/24/02	SB
Total Dissolved Solids (TDS)	1700	mg/L	1	5.0	160.1	9/25/02	TAL

Lab ID: 0204572-04
Sample ID: MW 4

Test Parameters

Parameter	Result	Units	Dilution Factor	RL	Method	Date Analyzed	Analyst
Chloride	1280	mg/L	1	5.00	9253	9/24/02	SB
Total Dissolved Solids (TDS)	5350	mg/L	1	5.0	160.1	9/25/02	TAL

Approval: Raland K Tuttle 9-30-02
Raland K. Tuttle, Lab Director, QA Officer — Date
Celey D. Keene, Org. Tech. Director
Jeanne McMurrey, Inorg. Tech. Director
Sandra Biezugbe, Lab Tech.
Sara Molina, Lab Tech.

RL = Reporting Limit N/A = Not Applicable

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0204572

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/L	0003245-02			<0.001		
Ethylbenzene-mg/L	0003245-02			<0.001		
Toluene-mg/L	0003245-02			<0.001		
p/m-Xylene-mg/L	0003245-02			<0.001		
o-Xylene-mg/L	0003245-02			<0.001		
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0204610-04	0	0.1	0.096	96.%	
Ethylbenzene-mg/L	0204610-04	0	0.1	0.098	98.%	
Toluene-mg/L	0204610-04	0	0.1	0.100	100.%	
p/m-Xylene-mg/L	0204610-04	0	0.2	0.208	104.%	
o-Xylene-mg/L	0204610-04	0	0.1	0.098	98.%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0204610-04	0	0.1	0.102	102.%	6.1%
Ethylbenzene-mg/L	0204610-04	0	0.1	0.104	104.%	5.9%
Toluene-mg/L	0204610-04	0	0.1	0.105	105.%	4.9%
p/m-Xylene-mg/L	0204610-04	0	0.2	0.221	110.5%	6.1%
o-Xylene-mg/L	0204610-04	0	0.1	0.105	105.%	6.9%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Benzene-mg/L	0003245-05		0.1	0.095	95.%	
Ethylbenzene-mg/L	0003245-05		0.1	0.097	97.%	
Toluene-mg/L	0003245-05		0.1	0.098	98.%	
p/m-Xylene-mg/L	0003245-05		0.2	0.207	103.5%	
o-Xylene-mg/L	0003245-05		0.1	0.098	98.%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

Test Parameters

Order#: G0204572

BLANK WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0003215-01			<5.00		
Total Dissolved Solids (TDS)-mg/L	0003239-01			<5.0		
DUPLICATE WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Total Dissolved Solids (TDS)-mg/L	0204572-01	6140		6160		0.3%
MS WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0204560-01	425	500	922	99.4%	
MSD WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0204560-01	425	500	913	97.6%	1.%
SRM WATER	**LAB-ID #**	**Sample Concentr.**	**Spike Concentr.**	**QC Test Result**	**Pct (%) Recovery**	**RPD**
Chloride-mg/L	0003215-04		5000	4960	99.2%	

Col: 160

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN DUTTON
Company Name: E T G I
Company Address: 2540 W MARLAND
City/State/Zip: HOBBS NM 88240
Telephone No: (505) 397-4882
Fax No: (505) 397-4701
Sampler Signature: Lemon Casas

Project Name: LATTION
Project #: YA 2218
Project Loc: ARTESIA, NM
PO #:

0204572

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify)	Analyze For: TCLP: TDS/CL/SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/602	RUSH TAT (Pre-Schedule)	Standard TAT
01	MW 1	9/19/02	1115	3	X		X			X		X				X							X		
02	MW 2		1225																						
03	MW 3		1200																						
04	MW 4		1141																						

40 ML
1.5 HDPE

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 3.0°C
Laboratory Comments:

Relinquished by:	Date	Time	Received by:	Date	Time
Lemon Casas	9/20/02	1100	Marcelo Campos	9/20/02	1100
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Marcelo Campos	9/20/02	1405	Cathy Kent	9/20/02	14:05

Appendix C

Water Well Search

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 26E Sections: 13,14,15,22,23,24,25,26,27

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | WATERS Menu | Help

WELL / SURFACE DATA REPORT 05/27/2003

(acre ft per annum) (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) X Y are in Feet UTM are in Meters)

DB File Nbr	Use	Diversion	Owner	Well Number	Source	Tws	Rng	Sec	q	q	q	Zone	X	Y	UTM Zone	Easting	Northir
RA 00297	IRR	1188.25	CHARLES MARTIN, INC.	RA 00297 S	Artesian	18S	26E	15	3	3	1				13	558394	362280
				RA 00297 S2	Artesian	18S	26E	15	4	2	1				13	559595	362321
				RA 00297 S3	Artesian	18S	26E	15	2	4	3				13	559596	362341
				RA 01296	Shallow	18S	26E	23	1	3	3				13	559997	362200
				RA 01296 S	Shallow	18S	26E	23	3	1	1				13	559998	362159
				RA 01296 S2	Shallow	18S	26E	23	1	3	2				13	560197	362200
				RA 01296 S3		18S	26E	15	3	3	1				13	558394	362280
RA 00585	IRR	558.25	WILLIAM NETHERLIN	RA 00585	Artesian	18S	26E	15	1	1	1				13	558391	362400
				RA 01054	Artesian	18S	26E	15	1	1	3				13	558391	362380
				RA 01176	Artesian	18S	26E	15	1	3	3				13	558392	362340
				RA 01176 S2	Artesian	18S	26E	15	1	4	3				13	558793	362340
				RA 01333 B	Shallow	18S	26E	15	1	3	3				13	558392	362340
RA 00773	DOM	3	R.C. HORNER	RA 00773		18S	26E	23	2	1					13	560899	362230
RA 00774	DOM	3	TOM LATTION	RA 00774		18S	26E	23	2	1					13	560899	362230
RA 00775	DOM	0	BOARD OF REGENTS	RA 00775		18S	26E	23	2	1					13	556755	362884
RA 00779	IRR	2832.2	DONALD FANNING AND SONS, INC.	RA 00779 S	Artesian	18S	26E	14	2	3	2				13	561000	362361
				RA 01524 A	Shallow	18S	26E	14	4	2	1				13	561201	362321
				RA 01524 S	Shallow	18S	26E	14	4	2	1				13	561201	362321
				RA 01524 S4	Shallow	18S	26E	13	1	1	1				13	561606	362402
				RA 01524 S5	Shallow	18S	26E	13	3	3	3				13	561600	362261
				RA 01524 S6	Shallow	18S	26E	14	2	3	4				13	561000	362341
				RA 01524 S7	Shallow	18S	26E	25	1	1	1				13	561603	362079

RA 00827	IRR	344.225	NEW MEXICO STATE UNIVERSITY	RA 00775		18S	26E	23	2 1	13	556755	362884
RA 00888 A	IRR	143.5	FRANK BOYCE	RA 00888 A	Artesian	18S	26E	27	4 3 3	13	559200	361937
RA 00888 AA	IRR	24.5	GREGORY ROCKHOUSE, LLC	RA 00888 A	Artesian	18S	26E	27	4 3 3	13	559200	361937
RA 00950	nul	0	CHARLES R. MARTIN, INCORPORATE	RA 00950		18S	26E	15	4 2 1	13	559595	362321
RA 01047	nul	0	CHARLES MARTIN	RA 01047		18S	26E	15	4 2 3	13	559595	362301
RA 01144	DOM	0	CHARIES R. MARTIN	RA 01144 -S	Artesian	18S	26E	23	1 3	13	560098	362190
RA 01176	IRR	1224.65	FARM CREDIT BANK OF WICHITA C/	RA 01176	Artesian	18S	26E	15	1 3 3	13	558392	362340
				RA 01176 S2	Artesian	18S	26E	15	1 4 3	13	558793	362340
RA 01210	IRR	673.75	ROGERS, INC.	RA 01210	Shallow	18S	26E	23	3 3 2	13	560199	362119
				RA 01210 S	Shallow	18S	26E	23	2 2 1	13	561199	362240
RA 01296	IRR	1067.15	CHARLES MARTIN INC.	RA 01296	Shallow	18S	26E	23	1 3 3	13	559997	362200
				RA 01296 S	Shallow	18S	26E	23	3 1 1	13	559998	362159
				RA 01296 S2	Shallow	18S	26E	23	1 3 2	13	560197	362200
				RA 01296 S3		18S	26E	15	3 3 1	13	558394	362280
RA 01333 B	IRR	105	WILLIAM C. & PATRICIA A. NETHE	RA 01333 B	Shallow	18S	26E	15	1 3 3	13	558392	362340
RA 01446	IRR	0	CHAS R. MARTIN	RA 01446	Shallow	18S	26E	15	3 1 0	13	558494	362310
				RA 01446 CLW	Shallow	18S	26E	15	3 3 1	13	558394	362280
RA 01446 A	nul	0	CHARLES MARTIN	RA 01446 A		18S	26E	23	1 3 1	13	559997	362200
RA 01865	PRO	0	JONES & YATES	RA 01865		18S	26E	15	4 2	13	559696	362311
RA 01881	PRO	0	BASSETT & BIRNEY ET AL	RA 01881		18S	26E	26	3 3	13	560105	361947
RA 01883	IRR	3	CLYDE MC DANIEL	RA 01883	Artesian	18S	26E	27	4 3 3	13	559200	361937
RA 02132	nul	0	X	RA 02132		18S	26E	23	2 1 1	13	560798	362240
RA 02132 B	IRR	866.6	BOB MORGAN	RA 02132 B	Shallow	18S	26E	24	1 2 1	13	562000	362240
				RA 02132 BS		18S	26E	24	1 3 1	13	561600	362200
				RA 02132 BS2	Shallow	18S	26E	24	1 1 3	13	561600	362220
				RA 02132 BS3	Shallow	18S	26E	24	1 3 1	13	561600	362200
RA 02389	DOM	3	PAUL TERRY	RA 02389	Shallow	18S	26E	15	2 2 1	13	559596	362401
RA 02800	DOM	3	CHARLES R. MARTIN	RA 02800	Shallow	18S	26E	15	3 3 1	13	558394	362280
RA 03055	DOM	3	MARK FANNING	RA 03055	Shallow	18S	26E	27	1 2 1	13	558796	362078
RA 03217	nul	0	DONALD E. FANNING	RA 03217		18S	26E	25	1 1	13	561704	362069
RA 03296	EXP	0	DONALD E. FANNING	RA 03296		18S	26E	14	4 4 3	13	561199	362260
RA 03340	DOM	3	JOE LEE	RA 03340	Shallow	18S	26E	22	1 3	13	558495	362189
RA 03409	DOM	3	SANDERS TERRY	RA 03409	Shallow	18S	26E	24	2 4 1	13	562804	362200
RA 03409 REPAR	DOM	3	SANDERS TERRY	RA 03409 REPAR	Shallow	18S	26E	24	2 4 2	13	563004	362200
RA 03499	DOM	3	TERRY SANDERS	RA 03499	Artesian	18S	26E	15	2 3	13	559295	362351
RA 03499 REPAR	DOM	3	TERRY SANDERS	RA 03499 REPAR		18S	26E	15	2 3	13	559295	362351
RA 03575	OIL	0	UNKNOWN	RA 03575		18S	26E	14	4 2 4	13	561401	362301
RA 03580	OIL	0	WESTERN VENTURES	RA 03580		18S	26E	22	1 3	13	558495	362189
RA 03585	OIL	0	STANLEY L JONES	RA 03585		18S	26E	14	4 1 4	13	560999	362301
RA 03588 REPAR	DOM	0	YATES BROTHERS	RA 03588 REPAR		18S	26E	15	3 2 1	13	558794	362320
RA 03598	OIL	0	WESTERN VENTURES	RA 03598		18S	26E	22	2 3 1	13	559196	362199
RA 03599	nul	0	JONES AND MACARTHUR	RA 03599		18S	26E	22	1 1 2	13	558594	362239
RA 03600	OIL	0	JONES AND MACARTHUR	RA 03600		18S	26E	14	2 3 2	13	561000	362361
RA 03731	DOM	0	STANDARD OIL CO. OF TEXAS	RA 03731	Shallow	18S	26E	14	1 1 1	13	559997	362402
RA 03750	STK	3	PAUL & JOHNNIE ROGERS	RA 03750	Shallow	18S	26E	24	4 3	13	562508	362109
RA 03829	DOM	3	DONALD FANNING	RA 03829		18S	26E	14	4 4	13	561300	362271
RA 03900	DOM	3	PAUL & JOHNNIE ROGERS	RA 03900	Artesian	18S	26E	24	1 3 1	13	561600	362200
RA 03968	DOM	3	SANDERS TERRY	RA 03968		18S	26E	24	2 2 1	13	562801	362241
RA 03986	DOM	3	CHARLES R. MARTIN	RA 03986		18S	26E	15	3 1 1	13	558393	362320

RA	04003	DOM	0	JOE R. LEE	RA	04003		18S	26E	27	4	3	3	13	559200	361937
RA	04018	OBS	0	E. P. CAMPBELL	RA	04018		18S	26E	26	4	3	3	13	560807	361937
RA	04701	DOM	3	J.H. WILLIS	RA	04701	Shallow	18S	26E	22	3	3		13	558496	362109
RA	05237	DOM	3	QUENTIN ROGERS	RA	05237		18S	26E	23	2	1	3	13	560798	362220
RA	06423	DOM	0	TODD TIDWELL	RA	06423		18S	26E	27	2	4		13	559701	362028
RA	06979	PRO	0	YATES PETROLEUM CORPORATION	RA	06979		18S	26E	25	1	1		13	561704	362069
RA	07219	MUL	3	ROBERT LYNN BARNES	RA	07219	Shallow	18S	26E	26	4			13	561109	361968
RA	07242 -EXPL	DOM	3	HUBERT C. GREEN	RA	07242 -EXPL	Shallow	18S	26E	26	4	3		13	560908	361947
RA	07242 EXP	EXP	0	HUBERT C. GREEN	RA	07242 EXP	Shallow	18S	26E	26	4	3		13	560908	361947
RA	07243 -EXPL	DOM	3	HUBERT C. GREEN	RA	07243 -EXPL	Shallow	18S	26E	26	4	3		13	560908	361947
RA	07243 EXP	nul	0	HUBERT C. GREEN	RA	07243 EXP	Shallow	18S	26E	26	4	3		13	560908	361947
RA	07243 EXPL	DOM	3	HUBERT C. GREEN	RA	07243 EXPL	Shallow	18S	26E	26	4	3		13	560908	361947
RA	09374	PRO	0	H&S OIL LLC	RA	09374	Shallow	18S	26E	25	1	1	2	13	561803	362079
RA	09437	DOM	3	VICKIE BOYCE	RA	09437	Shallow	18S	26E	27	4	3	3	13	559200	361937
RA	09466	DOM	3	B.R. WILSON	RA	09466	Shallow	18S	26E	22	1	3	3	13	558394	362179

Record Count: 86

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 26E Sections: 13,14,15,22,23,24,25,26,27

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report | Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 06/04/2003

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
RA	18S	26E	14				2	23	30	27
RA	18S	26E	15				5	30	42	38
RA	18S	26E	22				3	55	70	62
RA	18S	26E	23				2	70	80	75
RA	18S	26E	24				4	18	90	40
RA	18S	26E	26				6	50	55	52
RA	18S	26E	27				2	60	85	73

Record Count: 24