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**STAGE 1 & 2  
REPORTS**

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FINAL SITE INVESTIGATION REPORT  
FOR THE FORMER BRICKLAND REFINERY  
STAGE 1 ABATEMENT PLAN

VOLUME 1

*Prepared for:*

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*June 20, 1996*

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**Final Site Investigation Report  
for the Former Brickland Refinery  
Stage 1 Abatement Plan  
Document No. REX114B.DOC**

*June 20, 1996*

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Table 3

Background Concentrations of Metals in Soil

Sample Location	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
BG-1 (GCL 1996)	42	102	9.2	11	292	0.12	ND	ND
BG-2 (GCL 1996)	14	102	1.8	8	103	ND	ND	ND
NMEID (Lab SLD)	NA	77	NA	9	150	ND	NA	ND
NMEID (Lab AT)	71	NA	4.2	3	182	0.05	NA	1.2
NMEID (Lab IT)	NA	NA	NA	4.3	160	NA	0.8	NA
USGS Western US	<.01 - 97	NR	NR	3 - 2000	<10 - 700	<.01 - 4.6	NR	NR
Eder	<1.4	NA	0.9 - 5.5	7.5 - 23	6 - 270	<0.02 - 0.11	<1.3	<0.25 - 1.2

All Units are mg/Kg

NA = Not Analyzed

NR = Not Recorded

ND = Not Detected

N = Matrix spike out of acceptable range

\* = Digested duplicate out of 20% RPD (relative percent difference)

S = Performed by method of standard additions (MSA)

NMEID background data from NMEID Listing Site Inspection, January 16, 1990.

USGS Western US background data from Shaklette, H.T. et. al, 1971

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## 1.0 Executive Summary

The Brickland Refinery site is currently owned by Rexene Corporation (Rexene) and consists of 35 acres located in Sunland Park, Doña Ana County, New Mexico. The former petroleum refinery operated from 1933 to 1958 and was subsequently dismantled. Petroleum hydrocarbons have been detected in soils and groundwater at the site.

Two environmental investigations have evaluated groundwater chemistry and regional and local hydrogeologic conditions that influence the fate and transport of compounds in subsurface soils and the underlying shallow aquifer. These investigations were also conducted to establish baseline conditions prior to determining an appropriate response to the observed petroleum hydrocarbons.

Data obtained from site investigations conducted by Geoscience Consultants, Ltd. (GCL, 1994) and Eder and Associates, Inc. (Eder, 1990) indicate petroleum hydrocarbons in on-site soils are restricted to the southern two-thirds of the facility. Hydrocarbon constituents detected in groundwater monitor wells show a spatial correlation with areas of impacted soil and suggest migration of hydrocarbons from soil to groundwater. Free-phase hydrocarbons are observed in several wells and well points in the southern portion of the site, with a maximum thickness of several feet in MW-10 and WP-26S. GCL studies indicate the areal extent of phase-separated hydrocarbons is much less than originally projected by Eder (1990).

Our evaluation of regional and local geologic and hydrologic conditions indicate the heterogeneous clays and silts in subsurface soils have acted to restrict migration of constituents of concern. The observed petroleum hydrocarbons are confined to the property itself and the narrow strip of land between the site and the Rio Grande. The gates on the three culverts located on the southern half of the site have been closed. Stormwater runoff from the southern portion of the site, where constituents of concern are present in soils, can not occur since the three southern drainage culverts are now closed. There are no known off-site receptors of the observed constituents.

No obvious evidence suggests the site poses a significant threat to human health or the environment. Site conditions make this site a favorable candidate for restoration of soil and groundwater through intrinsic remediation (attenuation and natural biodegradation). A Stage II Abatement Plan will be submitted to address environmental concerns at the site.

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## 2.0 Site History

Located in Sunland Park, New Mexico, the Brickland Refinery site consists of approximately 35 acres situated next to the Rio Grande (Figure 1). From 1933 to 1958, the site was operated as a petroleum refinery. Rexene currently owns the site and operated the refinery from 1955 to 1958, and a quality control laboratory until 1964. Processing equipment and buildings associated with refinery activities have been dismantled and removed. All that remains on site are concrete foundations and rubble. Between 1964 and 1989, the site was leased to various parties to garage and service trucks, graze livestock, and store used bricks (Eder, 1990). Releases of petroleum hydrocarbons during the operational life of the facility resulted in varying impacts to soil and groundwater at the site. The nature and extent of releases were initially investigated by Eder and further quantified by GCL (GCL, 1994).

In 1989, the predecessor of the New Mexico Environment Department, the New Mexico Environmental Improvement Division (NMEID), conducted a Screening Site Inspection (SSI) (NMEID, 1989). The findings of the SSI were submitted to the Environmental Protection Agency (EPA) Region VI for review and possible inclusion on the Superfund National Priority List (NPL). The site is not, nor has it ever been, listed on the NPL. Because all releases of constituents of concern were directly related to petroleum hydrocarbon releases, jurisdiction of the site resides within the regulatory authority of the New Mexico Water Quality Control Commission (WQCC). Because a refinery formerly occupied the site, WQCC jurisdiction is administered by the New Mexico Oil Conservation Division (NMOCD).

## 2.1 Activities

From 1933 to 1958, the Brickland Refinery processed crude oil into consumer-oriented petroleum products. Typical refinery operations identified at the site in the 1950s included:

- "Petreco" de-salting to remove salt and water from crude oil feed stock
- Single-column crude oil distillation
- Thermal cracking of "heavy" (high boiling point) distillation ends

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- Polymerization of "light" (low boiling point) distillation ends into gasoline range fractions
- Platformer reforming of naphtha range fractions into higher octane products (added in early 1950s)
- Clay tower filtration of some petroleum fractions
- Gasoline and kerosene treatment
- Tetra ethyl lead blending

Finished products were stored in tanks on the site (Eder, 1990).

The Eder investigation divided the site into seven distinct areas based on refinery operations, as described below and shown in Figure 2.

#### *Area A: Bulk Petroleum Storage*

Area A consisted of aboveground storage tanks (ASTs) and pressure tanks. This area was never used as a production area. Two product storage tanks and two horizontal pressure cylinders were removed after the refinery was shut down. The area is presently covered with construction debris, primarily broken concrete.

#### *Area B: Bulk Petroleum Storage*

Product transfer piping crossed this area. Pipeline runs crossed to the storage tanks in Area A. This area is currently covered with debris such as broken stone, concrete, and bricks. Construction/demolition debris does not include drums or other containers that could contain contaminants.

#### *Area C: Former Residences (4)*

This area consisted of former pipelines between the main refinery and storage tanks in Area A. Historical photographs also show company housing. Piles of demolition debris are scattered throughout.

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## *Area D: Refinery Transportation Center*

This area was used for loading and unloading, vehicle maintenance, warehousing administration, indoor and outdoor storage, and laboratory facilities. A gasoline pump to fuel vehicles was also located in this area.

## *Area E: Drum and Tank Storage Area*

This area was used for petroleum storage, truck loading/unloading racks, drum storage, and truck maintenance facilities.

## *Area F: Refinery Process Facilities*

This was the production area with cracking towers, cooling towers, and other refinery process equipment. There was also a cooling water holding pond.

## *Area G: Cooling Water Lagoons and Slop Oil Lagoons*

Historical information shows this area consisted of a number of surface impoundments and tanks. Aerial photographs show the area was covered by sand dredged from the Rio Grande by the U.S. Army Corps of Engineers.

In 1958, the Brickland Refinery processed approximately 4,000 barrels of crude oil feed stock each day. By comparison, a typical refinery processes 168,000 barrels each day of crude oil feed stock in 1958 (Eder, 1990); therefore the Brickland Refinery was relatively small.

## 2.2 Nature of Releases

During the refinery's operation, hydrocarbon releases apparently originated from spills and leaks in storage tanks and underground piping between refinery units. Leaking pipes and tanks were either repaired or replaced, as necessary. The refinery recovered released hydrocarbons by excavating small pits and removing the accumulated material with a vacuum pump. The recovered hydrocarbon was reprocessed or returned to storage, depending on its condition. Rexene has attempted to locate spill records and documentation, but thus far, these appear not to exist. Therefore, further discussion of the nature of specific releases at this site would be conjectural.

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## 2.3 General Site Conditions

The site is adjacent to the Rio Grande, and presently vacant except for foundations from former refinery structures. Some construction and demolition debris is present on the site, including concrete from the refinery structures and rubble from road construction. Native vegetation grows over most of the site, but is more concentrated at the northern portion of the property.

The area in the vicinity of the site is composed primarily of residential, mixed residential/commercial, and commercial/industrial property. Figure 3 shows the status of land usage within a mile of the site. A list of property owners is included in Appendix A. The site adjoins several private and government land parcels that are described below:

- A private residence, owned by Evangelina Canales, is located adjacent to the northern property boundary.
- Property along the eastern site boundary, on either side of the Rio Grande, is owned by the International Boundary and Water Commission (IBWC).
- Private property, owned by Joseph J. Werthman, et. al, is located just south of the site; however, a narrow strip of IBWC land occurs between it and the site.
- Land south of the Werthman property and directly to the west of the site is owned by the American Eagle Brick Company and includes right-of-ways granted to the Southern Pacific Railroad. The levee road along the west side of the site is apparently located on this railroad right-of-way.

Land usage in the area of the site was determined from information gathered from County Assessors offices in Doña Ana County, New Mexico and El Paso County, Texas.

Climate in the lower Mesilla Valley is characterized as arid continental with wide temperature ranges, low humidity, high evaporation, and low precipitation. Precipitation occurs mostly as rain; about one-half of the total annual precipitation occurs from July to September. Rainfall during these three months is usually from brief, intense thunderstorms (Eder, 1990). Annual precipitation at the site averages

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10 inches per year. Pan evaporation is in excess of 90 inches per year, and therefore much of the precipitation evaporates.

## 2.4 Previous Site Investigations

In response to a neighbor's complaint about the death of shade trees on his property located just north of the site, the NMEID conducted a SSI (NMEID, 1989). The NMEID concluded constituents of concern were present in site soils and had migrated to groundwater. The NMEID did not observe releases to surface water. In addition, no groundwater users were identified within 3 miles of the site. Releases of hydrocarbons do not extend into the northern portion of the site. In addition, groundwater flow from beneath the site is to the south or southeast. Therefore, hydrocarbon releases at the site can be eliminated as a cause for the death of the shade trees.

In 1990, Rexene selected Eder and Associates, Inc. to conduct an expanded Phase I investigation of the site (Eder, 1990). The investigation focused on determining the nature and extent of hydrocarbon releases to subsurface soils and groundwater beneath the site. The field program included 15 monitoring wells, 24 soil borings, 91 backhoe test pits, and the collection of 20 surface soil, hand auger, river, and stream-bank samples (Figure 4). Some general conclusions of this report were:

- "Ambient groundwater chemistry would be characterized as saline and would not meet drinking water standards without regard to the petroleum-related contaminants found beneath the former refinery."
- "A review of the available data and reports for the 3-mile radius from the site did not reveal any drinking water wells that could intercept groundwater from the site. Surface water samples collected from the Rio Grande at points upstream, adjacent to, and downstream of the site were essentially indistinguishable in chemical quality."
- "There does not appear to be significant human or environmental exposure to this contamination. Heavy metals found in the soil appear to be chemically bound to the soil and are not readily leaching into the groundwater. Groundwater does contain dissolved volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), which relate to petroleum, however, no halogenated or solvent-related VOCs were found."

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The results of this investigation are summarized in Section 3.0. A detailed description can be found in the Phase I Investigation Report by Eder (1990).

GCL conducted a remedial investigation at the site in June and July of 1994 (GCL, 1994). The objectives of this investigation were to better characterize the chemical, physical, and biological properties of site soils to determine the influence these factors might have on natural degradation, dispersion, and attenuation of hydrocarbon constituents, and to evaluate potential remedial actions appropriate for site conditions.

As part of the investigation, GCL completed 14 soil borings, excavated six test trenches, and installed four monitoring wells and numerous well points. The screened intervals of all monitoring wells and well points at the site are listed on Table 1. Over 100 soil samples were collected as part of the investigation. These samples were used to characterize the geological, chemical, physical, and biological subsurface conditions. The results also provided an estimate of the vertical and horizontal extent of hydrocarbons occurring in the subsurface. The results of this investigation are summarized in Section 3.0. Detailed descriptions can be found in the Remedial Investigation Report for the Former Brickland Refinery (GCL, 1994).

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## 3.0 Site Characterization

### 3.1 Environmental Setting

#### 3.1.1 Regional Hydrogeology

The Brickland Refinery site is located at the southern portion of the Mesilla Valley near the United States and Mexico border on the western flood plain of the Rio Grande, northeast of the Cerro de Cristo Rey uplift (Figure 1). The southern portion of the Mesilla Valley is bounded by the Franklin Mountains on the east and the Cerro de Cristo Rey uplift on the west.

Surficial unconsolidated material in the valley consists of the Quaternary Rio Grande alluvium. This alluvium is estimated to be about 70 to 80 feet thick in the central portions of the valley, becoming very thin near the bedrock highs at valley margins. Below the alluvium is the folded Muleros formation comprised of shaley limestones and siltstones.

Groundwater occurs within the alluvium, with a regional groundwater flow direction toward the southeast. Sources of groundwater are from upgradient throughflow, upland runoff, direct infiltration of precipitation, and recharge from the Rio Grande when, during high-flow times, it is a losing stream. Groundwater discharges in the valley are primarily pumpage, evapotranspiration, downgradient throughflow, and discharge to the river at low-flow times, when the river is a gaining stream. Surface water is dominated by the Rio Grande whose flow is predominantly controlled by upstream Elephant Butte and Caballo reservoirs (Lovejoy, 1976).

#### 3.1.2 Site Hydrogeology

The site is situated on Quaternary alluvial deposits of the Rio Grande. According to soil borings, trenching, and monitoring well lithologic logs, the sediments at the site can be placed into two general categories: a near-surface zone (0 feet to 15 feet) of shallow, thin-interbedded heterogeneous clastic sediments and a deeper unit of relatively homogeneous sand, as shown in Appendices B, C, and geologic cross-sections (Plates A, B, C). The deeper lithology is observed in the deepest borehole at about 30 to 35 feet below ground surface (bgs).

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The upper lithologic zone consists of thin-bedded, fine-grained sand, silt, and silty clays. The deeper lithology consists of fine-grained sand characterized by well-sorted, subrounded sand grains that appear to coarsen with depth.

Groundwater beneath the site occurs under confined and unconfined conditions. Much of the shallow groundwater occurs in thin lenses of silt and fine sand interbedded with clay-rich sediments that do not readily transmit water. The depth to water measured in monitoring wells ranges from about 1.7 to 11.4 feet bgs; water level elevations are listed in Table 2. The water table elevation varies up to about 3.5 feet with levels typically highest in summer and lowest in winter, correlating with irrigation and changes in flow in the Rio Grande. Plots of water levels versus time for individual monitoring wells are included in Appendix D.

Groundwater flows primarily from northwest to southeast under a relatively flat hydraulic gradient of about 0.0005 to 0.0008 feet/foot across the site. Groundwater elevation contour maps for four consecutive quarters from September 1994 through June 1995 are shown in Figures 5 through 8. The direction of groundwater flow maintained an overall southerly trend, parallel to the Rio Grande. Based on water level differences in monitoring well clusters MW-3S, MW-3D, MW-6S, and MW-6D (deep and shallow), small vertically downward and upward hydraulic gradients of up to 0.1 foot have been observed.

Rio Grande discharge rates between 1990 and 1995 average approximately 700 cubic feet per second (cfs). During high flow times of the year, the river will recharge the shallow aquifer, and, during low-flow times, the aquifer will recharge the river. As shown in Figures 5 through 8, the direction of groundwater flow remains relatively constant, however.

Slug test results show an average hydraulic conductivity of 14 feet per day for the shallow interbedded sands, silts, and clays (Section 3.5). The slug test data and results are in Section 3.5. An overall porosity of 25 percent is assumed to be representative of such materials (McWhorter and Sunada, 1977). Groundwater flow velocity within the shallow materials is therefore estimated at about 14 to 20 feet per year.

Variations in water levels appear related to the flow in the Rio Grande. For example, in December 1994 (Figure 6), water levels are the lowest compared to the other quarters (see Figures 5, 7, and 8). Flow in the Rio Grande in December 1994 was also much lower than in the other quarters (IBWC, 1996).

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## 3.2 Unsaturated Zone

Two phases of unsaturated zone soil investigations have been completed at the site. A Phase I Investigation conducted by Eder in March 1990 included 24 soil borings, 91 backhoe test pits, and 20 surface soil, hand-auger, river and stream-bank samples (Eder, 1990). Sample locations are provided in Figure 4 and results of this investigation are provided in Tables 3 through 10 herein. In June and July of 1994, GCL conducted further soil sampling at the Brickland Refinery site that was reported in GCL's Remedial Investigation Report (GCL, 1994). Sample locations and results from GCL's investigation are shown in Figures 9 through 12 herein. Fourteen boreholes were drilled and six trenches were excavated. Lithologic logs were compiled for each sampling during field operations. Over 70 soil samples were collected for chemical analysis to further characterize hydrocarbon releases and locate potential source areas contributing to groundwater impacts. Selected soil samples were analyzed for physical and biological properties. The results are briefly summarized in this section. Supporting boring logs and trench diagrams from GCL (1994) are provided in Appendix C and Plates A, B, and C.

To characterize the nature and extent of hydrocarbon releases associated with past petroleum refining operations, soil samples were analyzed for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylenes (BTEX); and polycyclic aromatic hydrocarbons (PAHs). In addition, soil samples were collected from several areas of the site to identify potential source areas. These samples were analyzed for metals, including arsenic, barium, cadmium, chromium, lead, mercury, silver, and selenium.

Although both Texas, New Mexico and other states have guidelines established for many types of petroleum hydrocarbon release sites, neither guidelines nor standards have been established for metals such as lead. Therefore, throughout the text, we will be comparing the concentrations of constituents of concern to both natural background values and EPA guidelines.

### 3.2.1 Background Studies - Metals

Studies conducted by the El Paso City-County Health Department and the Texas Air Control Board (Appendix E) have indicated that background surface soil metal concentrations are very likely related to airborne deposition from stack emissions at the nearby Asarco smelter. Background concentration levels in areas near the

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refinery have ranged from 400 to 600 parts per million (ppm) for lead and 20 to 1,100 ppm for arsenic. NMEID collected background samples for metals at the site. In addition, GCL collected two background samples for metals in soil, one north and hydraulically upgradient from the site, and the other south and hydraulically downgradient from the site. The results of the NMEID and GCL sampling are presented in Table 3 and indicate the following:

- Background lead concentrations from GCL sampling range from 103 ppm north of the site and 292 ppm south. NMEID background concentration for lead ranges from 150 to 182 ppm.
- Background arsenic concentrations from GCL sampling range from 14 ppm to the north of the site to 42 ppm to the south. NMEID background concentration for arsenic is 71 ppm.
- Background chromium concentrations from GCL sampling range from 8 ppm to the north of the site to 11 ppm to the south. NMEID background concentrations range from 3 to 9 ppm.
- Background barium concentrations from GCL sampling are 102 ppm both north and south of the site. NMEID background concentration for barium is 77 ppm.
- Background cadmium concentrations from GCL sampling range from 1.8 ppm north of the site to 9.2 ppm to the south. NMEID background concentration for cadmium is 4.2 ppm.
- Background concentrations for the other metals sampled by GCL were non-detect north and south of the site, with the exception of mercury, which was 0.12 ppm to the south of the site. Other NMEID background metal concentrations were 0.05 ppm for mercury, 0.8 ppm for selenium, and 1.2 ppm for silver.

GCL and NMEID background sampling results are in agreement. The relatively small variation in some metals concentrations may be the result of normal variable distributions of metals in the soil and/or from irregular or intermittent dispersement of metals from the nearby Asarco smelter.

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## 3.2.2 Soil Sampling

A summary of the soils data is provided below (see Figure 4).

### *Area A - Bulk Petroleum Storage*

The Eder investigation for Area A included seven test pits and one hand auger boring. No additional soil sampling was conducted by GCL. The results of the soil sampling are discussed below:

- Photoionization detector (PID) screening did not detect VOCs in six of the seven test pits. Therefore, those six test pits were not sampled for TPH, BTEX, or PAHs.
- One test pit, A-TP-65, was sampled and found to contain 500 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) of xylenes from a 4-inch thick layer of stained soil (Table 4a).
- Two samples were composited from soil collected from each of the seven test pits and one hand auger boring for screening purposes (Eder, 1993). One uncomposited sample was collected from test pit A-TP-65. Table 4b shows the results of metals analyses for these samples, which were within the range of background concentrations shown in Table 3.

### *Area B - Bulk Petroleum Storage*

Four test pits and four hand auger borings were completed by Eder in Area B. No additional soil samples were collected by GCL. The results of the soil sampling are discussed below:

- PID screening did not detect VOCs and oil and grease samples were below screening criteria in all the test pits and hand auger borings. Therefore, they were not sampled for TPH, BTEX, or PAHs.
- Soil samples from the four hand auger borings were analyzed for metals (Table 5a). High concentrations of copper (1370 milligrams per kilogram [ $\text{mg}/\text{kg}$ ]), chromium (860  $\text{mg}/\text{kg}$ ), and lead (2830  $\text{mg}/\text{kg}$ ) were detected in hand auger boring B-HA-4, located in the northeastern corner of Area B. Hand auger boring B-HA-1, located in

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the southeastern corner of Area B, had slightly elevated concentrations of copper (390 mg/kg) and lead (427 mg/kg).

## *Area C - Former Residences*

Eder collected 10 samples from eight test pits and GCL completed one hollow-stem auger boring in Area C. The results of the soil sampling are discussed below:

- PID screening triggered BTEX sampling for three of the 10 Eder test pits, C-TP-1-2, C-TP-2-2, and C-TP-4. Of the three, only soil from test pit C-TP-4, located in the southwestern corner of Area C, contained BTEX constituents with 14,700  $\mu\text{g}/\text{kg}$  benzene; 75,500  $\mu\text{g}/\text{kg}$  ethylbenzene; and 125,800  $\mu\text{g}/\text{kg}$  xylenes (Table 6a).
- TPH was detected at a concentration of 97 mg/kg in a soil sample collected from hollow-stem auger boring B-01 (GCL), located in the western portion of Area C, from a depth of 4 to 6 feet below ground surface (Figure 9). No BTEX constituents were detected in this sample (Figure 10).
- PAHs were detected in test pit C-TP-8 (Eder), located in the northeast corner of Area C within an area of hydrocarbon-stained soil (Table 6b). PAHs were not detected in hollow-stem auger boring B-01.
- Eight soil samples were collected from test pits, and two were collected from hollow-stem auger boring B-01 and analyzed for metals. Metals were detected in all the samples at below or near background concentrations, with the exception of C-TP-5 which contained lead at a concentration of 683 mg/kg (Table 6c and Figure 11b).

## *Area D - Refinery Transportation Center*

Twenty-seven hollow-stem auger borings (24 by Eder and three by GCL), and seven test pits (six by Eder and one by GCL) were completed in Area D. In addition, one soil sample was collected from monitoring well MW-4. The results of the soil sampling are discussed below:

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- TPH was detected in hollow-stem auger borings B-02, B-03, and B-04 and test pit TR-2 in concentrations ranging from 165 mg/kg in TR-2 to 1240 mg/kg in B-02 (Figure 9).
- BTEX samples were collected from the test pits and detected the following ranges of BTEX constituents:
  - Benzene concentrations ranged from 2,300  $\mu\text{g}/\text{mg}$  in D-TP-52 to 17,900 in D-TP-54, both of which are located in the western portion of Area D (Table 7a and Figure 10).
  - Toluene was detected only in test pit TR-2, located in the southwest corner of Area D, at a concentration of 3,800  $\mu\text{g}/\text{kg}$  (Figure 10).
  - Ethylbenzene concentrations ranged from 1,300  $\mu\text{g}/\text{kg}$  in D-TP-53 and D-TP-72 to 44,600  $\mu\text{g}/\text{kg}$  in D-TP-32 (Table 7a and Figure 10).
  - Xylene concentrations ranged from non-detect in D-TP-2, D-TP-52 and D-TP-53 to 25,000  $\mu\text{g}/\text{kg}$  in D-TP-51 (Table 7a and Figure 10).

One sample collected from B-02 was analyzed by toxicity characteristic leaching potential (TCLP) and detected benzene at 260  $\mu\text{g}/\text{L}$ , below the regulatory level of 500  $\mu\text{g}/\text{L}$  (Figure 10).

- Results of soil samples obtained by Eder showed the highest PAH concentration in pits adjacent to the crude unloading racks and adjacent to the north most storage warehouse (Table 7b).
- Soil samples obtained by GCL from test pit TR-2 showed presence of 1-methyl naphthalene (12,000  $\mu\text{g}/\text{kg}$ ) and 2-methyl naphthalene (12,000  $\mu\text{g}/\text{kg}$ ) from TR-02 at 4 feet to 6 feet (Figure 12). These results correlate with the soil samples obtained by Eder for B-22 for 2-methyl naphthalene (18,500  $\mu\text{g}/\text{kg}$ ) (Table 7b).
- Cadmium, copper, zinc, and arsenic were found in one or more samples collected by Eder from hollow-stem auger borings across this area (Table 7c).

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- Soil samples obtained by GCL from 6 to 8 feet from B-02 showed low metal concentrations and all TCLP metals below the maximum concentration limits (Figure 11a).

## *Area E - Drum and Tank Storage*

Twenty-five test pits (20 by Eder and one by GCL) were excavated, along with two hollow-stem auger borings (GCL), and two surface soil samples (Eder) collected within Area E. Results of the soil sampling are discussed below:

- TPH concentrations ranged from 1,230 mg/kg at the 2- to 4-foot interval to 4,670 mg/kg at the 0- to 2-foot interval in hollow-stem boring B-07 (GCL). Analytical results are shown on Figure 9. No TPH samples were collected in Area E during Eder's phase of the investigation.
- BTEX samples were collected from nine test pits (eight Eder and one GCL) and two hollow-stem auger borings (GCL). VOC analyses by Eder showed widespread BTEX constituents in the southern part of the area. A soil sample (E-TP-32) collected adjacent to the former truck parking area contained 292,000  $\mu\text{g}/\text{kg}$  total BTEX (Table 8a). Only one sample obtained by GCL was analyzed for BTEX (total BTEX 71,700  $\mu\text{g}/\text{kg}$ ). Results obtained are similar to those obtained by Eder for E-TP-20 (total BTEX 53,200  $\mu\text{g}/\text{kg}$ ) in the vicinity of TR-1.
- Total PAH samples obtained by Eder ranged across the area from nondetect in E-TP-68 mg/kg to 227 mg/kg in E-TP-21 (Table 8b). Soil samples obtained by GCL from TR-1 at 2 feet to 4 feet and analyzed for PAH detected 1-methyl naphthalene, 2-methyl naphthalene, and naphthalene (Figure 12).
- Lead was the only metal found by Eder in Area E significantly above background values. The areas where lead was found in samples were limited to the southernmost transects, with the highest concentration of lead, 139 mg/kg in E-TP-26, found adjacent to the truck loading area (Table 8c). Lead concentrations from samples obtained by GCL from TR-01 at 0 feet to 2 feet (53 mg/kg) and 2 feet to 4 feet (9-10 mg/kg) were low, confirming Eder results obtained from E-TP-29 (88.4 mg/kg; Figure 11a).

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## *Area F - Refinery Process Facilities*

Twenty-nine test pits (27 by Eder and two by GCL) were excavated in Area F. In addition, six hollow-stem auger borings (four by Eder and two by GCL) were completed along with four surface samples collected by Eder during the 1990 investigation. The results of the soil sampling are discussed below:

- TPH was detected in all four GCL hollow-stem auger borings (Figure 9). The highest concentrations were 1,790  $\mu\text{g}/\text{kg}$  in boring B-08 from 6 feet to 8 feet bgs. No other TPH samples were collected in this area.
- BTEX concentrations were widespread in soil within Area F (Table 9a and Figure 10). Benzene was found in soil sampled from test pit TR-3 at a concentration of 219,000  $\mu\text{g}/\text{kg}$  at a depth of 3 feet bgs. One sample collected for TCLP benzene detected 1,100 micrograms per liter ( $\mu\text{g}/\text{L}$ ), which is above the 500  $\mu\text{g}/\text{L}$  regulatory level.
- PAHs were detected in soil sampled from test pits (Eder and GCL) and hollow-stem auger borings (GCL) (Table 9b and Figure 12).
- Three metals were distributed in soil samples obtained by Eder across Area F at concentrations significantly over background: copper, lead, and zinc. Lead concentrations in soil generally ranged from 0.008 mg/kg in F-TP-44 to 377 mg/kg in F-TP-34 (Table 9c). One TCLP lead sample obtained from B-08 by GCL at 4 feet to 6 feet was 82 mg/kg, which is above the 5 mg/kg regulatory level for TCLP lead (Figure 11). However, groundwater monitoring wells MW-7 (located nearby), MW-17, and MW-6S (located downgradient from B-08) did not detect any lead, nor has lead been detected in any other monitoring wells.

## *Area G - Cooling Water Lagoons and Slop Oil Lagoons*

Area G is the southernmost and furthest downgradient area of the site and contained a number of surface impoundments and storage tanks. Nineteen test pits (17 by Eder and two by GCL), four hollow-stem auger borings (GCL), and three surface soil samples (Eder) were completed in Area G. The results of the soil sampling are discussed below:

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- Although free-phase product occurs sporadically around the site as a sheen or extremely thin layers, one well in Area G, MW-10, contained a substantial thickness of free-phase product (up to 5 feet). Eder (1990, Plate 5), has previously projected free-phase product to occur as either a visible sheen or in measurable thicknesses extensively throughout the southern two-thirds of the site. However, further investigation by GCL determined that free-phase product occurs locally, trapped in discontinuous layers of silt and fine sand (Figure 13).
- TPH concentrations were detected in all the GCL test pits and hollow-stem auger borings (Figure 9). The highest concentration was 6,150 mg/kg from 10 to 12 feet bgs in boring B-13, located at the southern end of the site. No other samples were collected for TPH analysis.
- BTEX constituents are present in soil throughout Area G in varying concentrations. The highest concentration of total BTEX obtained was from test pit G-TP-12-2 at 253 mg/kg (Table 10a). One sample collected from hollow-stem auger boring B-12 (GCL) for TCLP analysis of benzene was non-detect (Figure 10a).
- The highest PAH concentrations were found on the north side of Area G and near the southeastern corner (Table 10b). The remainder of the area which has low PAH concentrations may reflect the previous locations of the four cooling water ponds that did not have any major source of hydrocarbons. 1-methyl naphthalene, 2-methyl naphthalene, naphthalene, phenanthrene, and pyrene were the only PAHs detected in samples obtained by GCL (Figure 12). Highest concentration of 2-methyl naphthalene detected by GCL was 160,000  $\mu\text{g}/\text{kg}$  from B-11 at 8 to 10 feet.
- Elevated concentrations of copper and lead were detected in the central part of Area G and near the eastern fence line in several test pits and surface soil samples excavated by Eder in the 1990 investigation (Table 10c). Soil samples from GCL's test pits and hollow-stem auger borings did not detect metals above background concentrations (Figure 11).

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### 3.2.3 Comparative Studies of Metals in Soil

The purpose of the comparative analysis is to determine the validity of anomalously high concentrations of some metals, primarily lead, that were identified in the Eder 1990 investigation. These anomalously high concentrations are considered suspect and may provide misleading input to the overall remedy selected for the site. In April 1996, GCL collected duplicate samples from as near as possible to selected Eder samples to confirm the level of metals concentrations. The GCL sample locations were selected to meet the following objectives:

- Provide a present-day comparison with previous representative metals concentrations from soil borings (B-1), hand-auger borings (B-HA-4), test pits (E-TP-26, F-TP-3), and surface samples (E-SS-4, and G-SS-8).
- Provide a comparison of the highest, moderate, and lowest concentrations of surface and subsurface metals from the earlier results obtained from Areas E, F, and G (E-SS-4, E-TP-26, F-SS-6, F-TP-34, G-SS-8, and G-TP-70), which are the areas previously indicating the highest metals impact.
- Provide a comparison with moderate to low metals concentrations from areas A, B, C, and D, where the occurrence of metals in soil is less prevalent (B-1 and B-HA-4).

The results of the sampling are summarized below. GCL results are compared with the Eder investigation, followed by a brief discussion of any variance in the data. Table 11 includes data collected from selected locations by Eder in 1990, and by GCL in April 1996. For each location, data from each investigation are presented for comparison by each selected element. The elements selected are the eight Resource Conservation and Recovery Act (RCRA) metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. All analyte concentrations are in mg/kg (ppm). Table 11 also presents background metals concentrations that were obtained by GCL. An explanation summarizing differences is presented at the end of this section.

#### *Area B*

- Location: B-HA-4
- Type of sample: shallow subsurface soil

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- Sample depth: approximately 24 inches
- Sample method: hand auger
- Soil description: moist sand with no apparent odor or discoloration down to a depth of approximately 15 inches, below which the soil was black, petroleum saturated, with a strong petroleum odor

Eder detected 5.98 ppm arsenic at this location, while GCL's sample results for arsenic are 10 ppm. These results are within an order of magnitude and are comparable. Laboratory documentation for the Eder sample reported the analysis of the matrix spike for this sample was out of the acceptance range and the digested duplicate for this sample exceeded the 20 percent relative difference considered acceptable.

The Eder sample identified 860 ppm chromium, while GCL's sampling resulted in 9 ppm. The GCL result is two orders of magnitude lower than the Eder result.

The Eder sample found 2,830 ppm lead, while GCL detected 75 ppm at this location. The GCL result is one and two orders of magnitude lower than the Eder result. Laboratory results for the Eder sample reported that the analysis of the matrix spike for this sample was out of the acceptance range.

The irregularities noted for Eder laboratory results are indicative of non-homogeneities or other anomalies in the sample matrix. The GCL samples are considered more accurate representations of actual subsurface conditions.

### *Area E*

- Location: E-TP-26
- Type of sample: shallow subsurface soil
- Sample depth: approximately 20 inches
- Sample method: hand auger
- Soil description: moist sand with no apparent odor or discoloration. Buried debris (brick, pipe, and rock) made obtaining sample difficult.

Eder detected 32.2 ppm arsenic at this location, while GCL's sample results for arsenic are 31 ppm.

The Eder investigation did not analyze for chromium, while GCL's sampling resulted in 12 ppm.

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The Eder investigation found 139,000 ppm lead, while GCL detected 18,300 ppm at this location. The GCL result is approximately one order of magnitude lower than the Eder result. The laboratory results for the Eder sample did report the analysis of the matrix spike for this sample was out of the acceptance range.

### *Area E*

- Location: E-SS-4
- Type of sample: surface soil
- Sample depth: approximately 6 inches
- Sample method: hand trowel
- Soil description: lightly moist sand with no apparent odor or discoloration

Eder did not sample for arsenic at this location. GCL's sample result for arsenic is 30 ppm.

The Eder investigation identified 75 ppm chromium, while GCL's sampling resulted in 14 ppm. The GCL result is nearly one order of magnitude lower than the Eder result.

The Eder investigation found 1,000 ppm lead, while GCL detected 1,100 ppm at this location. These results are essentially the same.

### *Area F*

- Location: F-TP-34
- Type of sample: shallow subsurface soil
- Sample depth: approximately 20 inches
- Sample method: hand auger
- Soil description: black, petroleum-saturated clay. Encountered buried red brick at 15 inches deep.

Eder did not sample for arsenic at this location. GCL's sample result for arsenic is 15 ppm.

The Eder investigation did not analyze for chromium at this location, while GCL's sampling resulted in 13 ppm.

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The Eder investigation found 377,000 ppm lead, while GCL detected 83 ppm at this location. The GCL result is four orders of magnitude lower than the Eder result. Laboratory documentation for the Eder sample reported that the digested duplicate for this sample was out of the 20 percent relative percent difference acceptance range. This indicates irregularities and/or non-homogeneity in the sample matrix. GCL believes the Eder result to be anomalously high. Order of magnitude variations would not be unexpected, but four orders of magnitude, as is the case for this comparative analysis, is excessive. The GCL sample is considered more reliable and representative of actual conditions.

## *Area F*

- Location: F-SS-6
- Type of sample: surface soil
- Sample depth: approximately 6 inches
- Sample method: hand trowel
- Soil description: discolored, reddish brown 4 inches deep

Eder did not sample for arsenic at this location. GCL's sample result for arsenic is 58 ppm.

The Eder investigation detected 8 ppm for chromium at this location, while GCL's sampling resulted in 13 ppm. These values are slightly different, but are within the same order of magnitude.

The Eder investigation found 260 ppm lead while GCL detected 1,500 ppm at this location. The GCL result is one order of magnitude greater than the Eder result.

## *Area G*

- Location: G-SS-8
- Type of sample: surface soil
- Sample depth: approximately 8 inches
- Sample method: hand trowel
- Soil description: moist sand with no apparent odor or discoloration

Eder did not sample for arsenic at this location. GCL's sample result for arsenic is 13 ppm.

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The Eder investigation identified 7 ppm chromium, while GCL's sampling resulted in 9 ppm. These results are essentially identical.

The Eder investigation found 24,000 ppm lead while GCL detected 36 ppm at this location. The GCL result is three orders of magnitude lower than the Eder result.

The only other results that can be compared are for mercury, which Eder reported 0.15 ppm in 1990 and GCL reports as non-detect.

## *Area G*

- Location: G-TP-70
- Type of sample: deep subsurface soil
- Sample depth: approximately 85 inches
- Sample method: hand auger
- Soil description: moist sand with no apparent odor or discoloration down to a depth of approximately 72 inches, below which the soil was black, petroleum saturated, with a strong petroleum odor

Eder did not sample for arsenic at this location. GCL's sample result for arsenic is 65 ppm.

The Eder investigation identified 97 ppm chromium, while GCL's sampling resulted in 104 ppm. These results are essentially the same.

The Eder investigation found 34,900 ppm lead, while GCL detected 7,200 ppm at this location. The GCL result is one order of magnitude lower than the Eder result. Laboratory documentation for the Eder sample reported that the analysis of the matrix spike for this sample was out of the acceptance range.

## *Conclusion*

While much of the comparative sampling resulted in similar concentrations of metals in the soil, sufficient variations occurred to raise concern that anomalously high concentrations of metals (especially lead) reported by Eder (1990) are not representative of true site conditions. Irregularities identified for some of the Eder (1990) analyses indicate nonhomogeneity of the sample matrix, and therefore introduce some doubt as to accuracy and reproducibility of the results. Where single order of magnitude variances have been identified by comparative analysis,

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these are considered to reflect the normal range of concentrations in sampling a soil matrix. However, where three and four orders of magnitude variances occur together with irregularities in Eder (1990) analytical results in samples with unusually high concentrations, the Eder results are considered suspect.

Comparative analysis of sample results for location F-TP-34 is an example; we believe the 83 ppm concentration for lead determined by GCL to be more reliable than the 337,000 ppm Eder result.

### 3.3 Groundwater

To document and determine trends in groundwater chemistry, groundwater samples were collected and free-phase hydrocarbon thicknesses have been measured on a quarterly basis from 1993 to 1995. These samples are briefly summarized below and more extensive discussions can be found in the Remedial Investigation Report (GCL, 1994).

#### 3.3.1 Free-Phase Hydrocarbon

Based on the results of the 1990 investigation conducted by Eder, free-phase floating product was predicted to occur in the southern two-thirds of the site as a visible sheen or a measurable thickness (Eder, 1990, Plate 5). Since then, additional investigations by GCL have determined the actual extent of free-phase floating product to be discontinuous.

Free-phase hydrocarbon thickness has been measured on a quarterly basis since December 1993. A map showing the extent of free-phase hydrocarbons is shown on Figure 13. The occurrence of free-phase hydrocarbons and variations thicknesses over time are shown in Table 12 for monitoring wells and well points.

Free-phase hydrocarbon occurs locally and appears to be associated primarily with lenses of silt and fine sand. These lenses are discontinuous throughout the site, and, although somewhat conductive horizontally, have not been found to contain significant volumes of free-phase hydrocarbons. Hydrocarbons occurring in the subsurface in this manner are therefore effectively trapped in place.

The difference between GCL's current interpretation and Eder's initial projection of wider-spread free-phase is attributable to GCL's more detailed understanding of the site stratigraphy as described previously. Although free-phase product can be

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detected in various locations on the site, it is not valid to project it continuously. Table 12 shows results of product thickness measurements and clearly confirms the discontinuous nature of its occurrence in the subsurface.

### 3.3.2 Benzene, Toluene, Ethylbenzene, and Xylene Concentrations

Quarterly analytical results for BTEX constituents are listed in Table 13; total BTEX concentrations versus time plots are shown in Appendix F; and benzene concentration contour maps can be found in Figure 14. Toluene, ethylbenzene, and xylenes were generally below WQCC action levels, therefore contour maps were not generated for these constituents. High and low seasonal trends of BTEX are variable at the site. However, MW-6S has shown several cycles with high concentrations in the summer months.

Well locations with high BTEX concentrations coincide with areas of known hydrocarbon occurrences in soil. They are associated with historic site operations in the former refinery areas near the west-central portion of the facility and the sludge pond area near the southern boundary of the site.

Monitoring well MW-6S is an off-site groundwater monitoring well located east of the southeastern portion of the site. This well is the only off-site well adjacent to the river that has fairly consistently shown the presence of benzene. The benzene found in MW-6S does not appear to have had an impact on sediments and surface water because benzene has not been observed in sediment and surface water samples (Tables 14 and 15).

GCL collected surface water samples from the Rio Grande adjacent to the site to determine if benzene from the site is impacting the Rio Grande (Table 14). Since sampling of the Rio Grande water has failed to detect benzene, direct sampling of soils immediately adjacent to MW-6S and from the nearby river bed was completed.

Samples from sediments near MW-6S could contain benzene due to sorption onto clay and silt size fractions within the sediment, if a pathway exists from the groundwater at MW-6S. The analytical results of 20 sediment samples indicate only one analyte, total xylenes, is present at the detection limit (ppb) in the sediments adjacent to the Rio Grande (Table 15). However, at this low level, xylenes are not a threat to human health or the environment.

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### 3.3.3 *Polycyclic Aromatic Hydrocarbons, Phenols, Water Quality Control Commission Metals/Major Cations and Anions*

Samples collected during quarterly sampling events have also been analyzed for PAHs, phenols, WQCC metals, and major cations and anions.

#### *Polycyclic Aromatic Hydrocarbons*

PAHs have been detected in MW-5, MW-8, MW-11, and MW-15 and well points located in the interior of the site; results are summarized in Appendix F. PAH results for March 1995 are shown in Figure 15. Concentrations have ranged as high as 5,600 ppb at interior locations. Only one off-site well (MW-6S) has shown the presence of any PAHs, which was detected in only one sampling event (June 1995). Therefore, off-site migration of these heavier molecular weight compounds does not appear to have occurred. Quarterly results for individual wells and detected PAH analytes can be found in Appendix G. Concentration versus time plots can be found in Appendix H.

#### *Phenols*

Phenols were detected in 10 on-site monitoring wells at concentrations as high as 6,000 ppb during the investigation. Phenols have not been detected in off-site wells. Quarterly results for individual wells and analytes can be found in Appendix I.

#### *Metals*

Various WQCC metals have been detected in monitoring wells during the investigation. The most significant finding from the metals analyses was that even though there was one TCLP exceedance for lead in soil, lead was totally absent from any monitoring well on or off site. Among detected metals, arsenic, barium, cadmium, chromium, iron, manganese, mercury, and selenium in groundwater reached or exceeded WQCC groundwater standards, and aluminum, cobalt, copper, molybdenum, nickel, silver and zinc were below WQCC groundwater standards. Quarterly results are shown by monitoring well (Table 16).

Arsenic concentrations in groundwater exceeding WQCC groundwater standards were found in MW4, MW-5, MW-6S, MW-7, MW-8, MW-11, MW-14, MW-15 and MW-17, primarily in September 1994. MW-5 and MW-8 were the only two monitoring wells in which arsenic concentrations were found exceeding WQCC

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groundwater standards in most recent sampling event. The highest arsenic concentration was 0.48 milligrams per liter in MW-6S in September 1994 sampling event.

Barium concentrations in groundwater exceeding WQCC groundwater standards were observed in MW-6S, MW-11, and MW-17. Barium concentrations in those three monitoring wells all show some degree of a decreasing trend. No barium was detected above WQCC groundwater standards in most recent sampling event in those three monitoring wells or in groundwater exceeding WQCC groundwater standards in any monitoring well in most recent sampling event.

Cadmium concentrations were observed exceeding WQCC groundwater standards in MW-6D and MW-9S in the sampling event of December 1993, but were all below WQCC groundwater standards in most recent sampling event.

Chromium concentrations were found equal to WQCC groundwater standards only in MW-12 from the September 1994 sampling event.

Iron and manganese concentrations exceeded the WQCC groundwater standards in all monitoring wells except MW-5. Based on available data, a decreasing trend was found for iron in MW-1, MW-3D, MW-3S, MW-6D, MW-6S, MW-7, MW-8, MW-9S, and MW-11, and only MW-6S, MW-8, and MW-9S were found to exceed WQCC groundwater standards in most recent sampling event. An increasing trend was observed in MW-15 for iron. The highest concentration of iron was 13.1 milligrams per liter in MW-14 in September 1994 sampling event.

A decreasing trend for manganese was found in MW-1, MW-3D, MW-3S, MW-4, MW-6D, MW-6S, and MW-9S. However, only MW-3S, MW-5, and MW-8 were found to be below WQCC groundwater standards in the most recent sampling event.

Mercury was found exceeding WQCC groundwater standards only once in MW-14, in the December 1994 sampling event.

Selenium was found to exceed WQCC groundwater standards once in MW-1, MW-3D, MW-3S, MW-5, MW-6S, and MW-8, and twice in MW-12. No selenium was detected in the most recent sampling event in December 1994.

Since groundwater is not used as the source of drinking water, those elevated metal concentrations in groundwater do not appear to pose a human health risk.

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The metals detected in site soils appear to be tightly bound or complexed within the naturally-occurring clayey/silty soils.

Results from the other metals follow a similar pattern. Therefore, following approval of NMOCD, this analytical suite was dropped from the quarterly monitoring program and replaced by an annual surveillance sampling event. Quarterly results for individual wells and WQCC metals can be found in Appendix J.

### *Anions/Cations*

All major anions and cations have been observed in wells at the site with the exception of nitrate. Chloride and sulfate are above WQCC groundwater standards. However, some of the highest observed concentrations of chloride and sulfate are observed in the upgradient well MW-12. Based on these observations, these parameters were dropped from the quarterly sampling. Quarterly results for individual wells and major ions can be found in Appendix J.

### *Summary*

Observed groundwater PAH and phenol detections coincide spatially with BTEX values and areas of known hydrocarbon occurrences in the soil. Off-site migration has been minimal and the age of the site (approximately 37 years) indicates that future impacts will be minimal. Metals do not pose a threat to groundwater and are tightly bound within the site soils. The shallow groundwater upgradient of the site is saline and sulfate-rich, suggesting that the shallow groundwater is not suitable as a drinking water source.

## 3.4 Analyses of Slug Tests at the Site

### 3.4.1 Introduction

Aquifer slug tests were performed by GCL at the former Brickland Refinery site in July 1995 to determine the hydraulic conductivity of the saturated zone. The results of these slug tests were used to characterize groundwater flow and contaminant transport at the site, and help design a hydraulic model to test the potential off-site impacts that might occur due to the migration of contaminated groundwater.

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### *3.4.2 Local Hydrogeological Conditions*

The shallow geology at the site is composed of Quaternary (Holocene) alluvium deposited by the Rio Grande. The sediments can be divided into two lithologies: a shallow, thin-bedded heterogeneous clastics lithology, and a deep, relatively homogeneous sand lithology. The shallow lithology extends from ground surface to about 10 to 15 feet bgs and consists of silty clay, sand, silty sand, and gravelly sand. The deep lithology consists of a thick, homogeneous, well-sorted, subrounded sand that appears to coarsen with depth. The shallow aquifer occurs under confined and unconfined conditions.

### *3.4.3 General Well Information*

Twenty monitoring wells have been installed on and off site. Three of them (MW-3D, MW-6D, and MW-9D) located nearest to the Rio Grande were completed to approximately 35 feet bgs in the deep sand unit, while the other wells were completed to 15 to 20 feet bgs. The screen intervals of these wells are located either fully within the shallow unit, partially within the shallow unit, or fully within the deep unit. All boreholes were drilled with a 12-inch hollow-stem auger, and monitoring wells were constructed using a 4-inch diameter PVC casing with 10 feet of screen. The annuli around screen sections of all wells were packed with #1C Lonestar sand that has an assumed porosity of 27 percent.

Slug tests were performed in monitoring wells MW-1, MW-3S, MW-3D, MW-5, MW-6S, MW-6D, MW-8, MW-9S, and MW-11. Wells MW-3D, MW-6D, and MW-9D are completed in gravelly sand or sandy gravel. Well MW-6S is completed within sand, and well MW-8 in silty clay. The other wells (MW-1, MW-3S, MW-5, and MW-11) are completed in silty clay, silty sand, and/or sand. These nine wells were selected to provide testing of a wide range of aquifer materials encountered all over the site.

### *3.4.4 Slug Test Theory*

A slug test is comprised of observing the response of the water level in a monitor well over time after an induced perturbation. This involves quickly raising or lowering the static water level in a monitor well and recording the subsequent falling or rising water levels over time. The water level in a well is quickly raised by inserting a solid slug below the water table. The subsequent falling of water

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level versus time constitutes a falling-head slug test. Once the static conditions are achieved, the solid slug is quickly removed from the well. The subsequent rising of water level versus time constitutes a rising-head slug test.

The Bouwer and Rice analytical solution (Bouwer and Rice, 1976; Bouwer, 1989) was used to estimate hydraulic conductivity. The computer program AQTESOLV (Duffield, 1995) was used to perform the necessary calculations.

### 3.4.5 Slug Test Instrumentation and Procedures

An in situ Hermit 1000 data logger was used to record water level versus time during all slug tests. For all tests, the time was set to minutes and water level to feet of water. Prior to each test, the static water level and the well depth were measured using a water level probe, and the height of the static water column in the well was calculated. An in situ 30-psig pressure transducer was set approximately 2 feet above the well bottom and connected to the data logger. All recorded water levels were the difference between the static water level and the instantaneous water level at a specific time during the test. Once the data logger and transducer were ready for testing, a stainless steel slug about 4-feet long and 2 inches in diameter was quickly submerged below the static water level coincident with starting the data logger. After a few minutes, the static water level difference was manually read from the data logger and recorded in the fieldbook. The test was stopped when the water level difference approached zero, showed fluctuation, or had a very small decrease ( $<0.01$  feet/2 minutes). Finally, the data logger was disconnected from the transducer and connected to a printer, and the results were printed.

### 3.4.6 Slug Test Results

The following basic data are needed to analyze a slug test:

- Casing radius,  $r_c$
- Screen length (L)
- Wellbore radius,  $r_w$
- Static height of water in well ( $H$  = well depth minus water level in well)
- Porosity of gravel pack around the casing screen (n)
- Saturated thickness of aquifer (b)

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- Ratio of vertical to horizontal hydraulic conductivity ( $K_z/K_r$ ), as determined by local hydrogeological conditions (for homogeneous and isotropic aquifer,  $K_z/K_r=1$ )
- Initial water level ( $H_0$ )

Table 17 summarizes these data for all the slug tests performed at the former Brickland Refinery site.

With these data, the computer program AQTESOLV was used to analyze the slug test data. During the analyses, the raw field data were imported into the program and the basic data were provided. A visual matching method was then used to locate the straight line section of the test data and calculate the hydraulic conductivity (Table 17). Finally, the plot of each test was printed (Appendix K).

Two distinct types of materials were slug tested at the site: relatively high conductivity materials (sand/silt/clay mixture) and relatively low conductivity materials (primarily tight clay/silt mixtures). For the former materials, the water level response in many instances comprised a rapid early-time filter pack response (most noticeable in rising head tests) followed by later time longer-duration aquifer-characteristic response. The more conductive wells tested did not produce this early time filter pack response because the filter pack K is similar to the aquifer K.

On the other hand, with increasingly lower aquifer K compared to filter pack K (as in the latter clayey materials), this initial rapid filter pack response becomes significantly more pronounced, and is nonlinear, and longer in duration. These early time nonlinear data are representative of the filter pack response but impeded due to the very low aquifer K. The data following this filter pack response become linear at long times, and represent the aquifer response. The pronounced early time filter pack response is due to the inability of the clayey materials to accept water quickly. Therefore, more time is required for wellbore water to reach a steady-state inflow rate into the aquifer.

An aquifer thickness was used in the analyses to take into consideration the partial penetration effect of wells. However, the results are not very sensitive to this additional parameter in the slug test analyses. As a result, quite a large range of aquifer thickness values may be used without influencing the final derived K values. Therefore, the method used to estimate aquifer K is of sufficient rigor since slug tests provide only approximate K aquifer values.

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Table 17 shows that both falling- and rising-head test results for wells completed in the gravelly sand or sandy gravel formation (MW-3D, MW-6D, and MW-9S) have high conductivities (0.04-0.07 ft/min). The well completed fully in the silty clay formation (MW-8) has the lowest conductivity (0.00008 ft/min). Wells completed partially in silty clay or silty sand (MW-1, MW-3S, MW-5 and MW-11) have intermediate conductivities (0.0001-0.0015 ft/min). The only exception is well MW-6S, which was completed 100 percent in sand, but has a conductivity of 0.0009 ft/min. This is lower than the conductivity determined for MW-3S which is completed 10 percent in silty sand (0.0015 ft/min). The inconstancy, however, is relatively minor. It is possible that the sand grains at well MW-6S is finer than in the vicinity of MW-3S. Table 17 shows both falling- and rising-head tests in the same well yields similar conductivity values.

### 3.4.7 Summary

Slug tests were performed in nine monitoring wells at the former Brickland Refinery site. Results showed that wells completed partially in sandy gravel or gravelly sand (e.g., MW-3D, MW-6D, and MW-9S) have high conductivities (0.04-0.07 ft/min); wells completed partially in silty clay, silty sand, or in fine sand (e.g., MW-1, MW-3S, MW-5, MW-11, and MW-6S) have intermediate conductivities (0.0001-0.0015 ft/min); and the well completed fully in silty clay (e.g., MW-8) has the lowest conductivity (0.00008 ft/min). These results indicate the conductivities determined by the slug tests are consistent with the hydrogeological settings.

## 3.5 Transport Modeling

### 3.5.1 Introduction

The concentration of benzene in the Rio Grande downstream of the site was determined using a two-step process. First, the benzene concentration in shallow groundwater that enters the river was determined. Second, shallow groundwater that enters the river was assumed to mix with upstream river water to determine a final downstream benzene concentration in the river. Because the amount of water flowing in the river affects the final downstream benzene concentration, high, low, and average flow conditions were used to estimate a range and an average for the final downstream benzene concentration in the river.

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The benzene concentration entering the river was determined for the following current and future source conditions:

Current Source Conditions: For current source conditions, the benzene concentration observed in MW-06S, located adjacent to the river, is assumed to be the concentration in groundwater that enters the river.

Future Source Conditions: Future source conditions assume no remediation occurs, and that benzene enters the shallow groundwater in either of two scenarios. Representing a *worst case* scenario, the observed benzene concentrations in the free-phase hydrocarbons of MW-10, are assumed to represent the benzene concentration in groundwater that enters the river.

Representing a *realistic scenario*, the highest observed benzene concentrations in groundwater, primarily in the western portion of the site, are assumed to remain as a continuous source for the next 30 years. The concentration of benzene in groundwater that enters the river is calculated using an analytical model.

### 3.5.2 Conceptual Site Hydrogeologic Model

Prior to evaluating these scenarios, a conceptual site hydrogeologic model was formulated. A conceptual model is a simplified "picture" of the hydrogeology of a site using average values, or a range of values, for aquifer properties such as hydraulic conductivity, porosity, aquifer thickness, and hydraulic gradient. Also, the portion of aquifer through which impacted groundwater flows is quantified.

Based on the last four quarters of water level elevations, groundwater flows to the southeast under an average hydraulic gradient of about 0.0010 feet/foot (ft/ft). Groundwater is assumed to flow horizontally within the shallow aquifer. Since the shallow materials are interbedded clays, silts, and sands in this region, groundwater is observed to occur under confined to unconfined conditions.

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Based on the results of slug tests performed in both shallow and deep monitor wells at the site (presented in Appendix K) the average hydraulic conductivity of the upper aquifer material is about 14 feet per day (ft/day). For clayey to sandy materials, this is a reasonable value. An average effective porosity of 25 percent is assumed to be representative of such materials.

Hydrocarbons occur primarily within the upper, fine-grained materials, with concentrations greatest in the shallow monitor wells completed within the upper 15 feet of the aquifer. Hydrocarbons are not detected in deep monitor wells screened within the upper 15 to 35 feet of the aquifer. Consequently, hydrocarbons are assumed to occur within the upper 15 feet of the aquifer.

The following hydrogeologic model was used as a basis for evaluating the various aquifer-to-river pathway scenarios:

- Groundwater beneath the site flows to the southeast toward the Rio Grande under confined to unconfined conditions with a hydraulic gradient of 0.001 ft/ft at a velocity of about 20 feet per year. Dissolved-phase hydrocarbons occur within the upper 15 feet of the aquifer and migrate at the velocity of groundwater.

### 3.5.3 *Current Source Conditions*

The current source conditions scenario assumes that the current benzene concentration in MW-6S (220 ppb, June 1995) is the concentration in groundwater that enters the river. An assumed "worst case" length of groundwater containing benzene that potentially impacts the river bank is approximately 450 feet long. This recharge section is centered at MW-6S and lies between MW-08 and MW-09.

To estimate a range of downstream benzene concentrations in the river, the mixing cell equations shown on Figure 16 were used. A groundwater flow rate (Q) of 0.0011 cubic feet per second (cfs) was calculated using the mixing cell equation No. 2 ( $Q = KiA$ ) and the following parameters:

- Hydraulic conductivity (K) = 14 ft/day
- Hydraulic gradient (i) = 0.001 ft/ft
- Groundwater flow area (A) = 15 feet deep by 450 feet wide

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The hydraulic conductivity and hydraulic gradient values discussed in the previous section were used to calculate the groundwater flow rate. The depth of 15 feet for the groundwater flow area corresponds to the upper 15 feet of the water table where hydrocarbons are detected. The width of 450 feet for the groundwater flow area is a "worst case" assumption of the length of potential impact to the river bank based on the current benzene concentration map. The downstream benzene concentrations for high, low and average river flow conditions, are calculated using the mixing cell equation No. 1 with the following parameters:

- Groundwater concentration ( $C_g$ ) = 220 ppb
- Groundwater flow rate ( $Q_g$ ) = 0.0011 cfs
- High upstream river flow rate ( $Q_r$ ) = 2,400 cfs
- Low upstream river flow rate ( $Q_r$ ) = 68 cfs
- Average upstream river flow rate ( $Q_r$ ) = 630 cfs

The high, low, and average upstream river flow rates are based on the maximum, minimum, and average streamflow rates for 20 years of record (1975 through 1995) at the Courchesne Bridge gaging station located approximately 2,000 feet upstream of the site (IBWC, 1996).

Assuming complete mixing, the calculated downstream benzene concentrations in the river for high, low and average river flow conditions are 0.0001, 0.0036 and 0.0004 ppb, respectively. These values are several orders of magnitude below the state of New Mexico Drinking Water Standard of 5 ppb.

### *3.5.4 Future Source Conditions - Realistic Case Scenario*

The realistic case scenario for future source conditions assumes that the highest benzene concentrations observed in monitor wells MW-4, MW-5, MW-8, and MW-14 represent continuous benzene sources for groundwater. Groundwater concentrations are then predicted 30 years into the future. The resulting benzene concentration in groundwater that enters the river is used in the mixing equation to estimate the downstream benzene concentrations in the river at high, low and average flow conditions.

Based on the conceptual model for the site, a simple two-dimensional analytical solution to the problem of continuous sources injected into a relatively thin aquifer can be used. The analytical solution can be determined by the computer program PLUME2D (Beljin, 1989).

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Input requirements for the program include source injection rates, groundwater flow velocity, lateral and longitudinal dispersivity, aquifer thickness, and porosity. For this scenario, the following input parameters were used:

<u>Parameter</u>	<u>Value</u>	<u>Units</u>	<u>Reference</u>
Injection rates	MW-4: .002	lbs/d	calculation
	MW-5: .009	lbs/d	calculation
	MW-8: .017	lbs/d	calculation
	MW-14: .025	lbs/d	calculation
Porosity	25	percent	assumption (McWhorter/Sunada, 1977)
Groundwater Velocity	0.055	ft/d	calculation
Aquifer Thickness	15	feet	observation
Duration	30	years	assumption
Longitudinal Dispersivity	100	feet	assumption (Neuman, 1990)
Transverse Dispersivity	10	feet	assumption (Neuman, 1990)
Retardation Factor	1	-	assumption
Decay	0	-	assumption

The injection rates were selected so that the observed benzene concentration at each well was recreated in the model. Retardation and decay are assumed negligible and are not used in the model. Therefore the model is conservative with respect to the final concentrations in groundwater that enter the river. Copies of the model input and output are included in Appendix L.

Based on the modeling results, an assumed "worst case" total benzene concentration in groundwater that enters the river bank equals 31,780 ppb (the individual model cell concentrations range from 30 ppb to 4,700 ppb) and an assumed "worst case" length of groundwater containing benzene that potentially impacts the river bank is 850 feet long.

To estimate a range of downstream benzene concentrations in the river, the mixing cell equations shown on Figure 16 are used. A groundwater flow rate (Q) of 0.0021 cfs is calculated using the mixing cell equation No. 2 ( $Q = KiA$ ) and the following parameters:

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- Hydraulic conductivity (K) = 14 ft/day
- Hydraulic gradient (i) = 0.001 ft/ft
- Groundwater flow area (A) = 15 feet deep by 850 feet wide

The hydraulic conductivity and hydraulic gradient values discussed in Section 3.5.2 were used to calculate the groundwater flow rate. The depth of 15 feet for the groundwater flow area corresponds to the upper 15 feet of the water table where hydrocarbons are detected. The width of 850 feet for the groundwater flow area is a "worst case" assumption of the length of potential impact to the river bank, which is based on the modeling results.

The downstream benzene concentrations, for high, low and average river flow conditions, are calculated using the mixing cell equation No. 1 with the following parameters:

- Groundwater concentration ( $C_a$ ) = 31,780 ppb
- Groundwater flow rate ( $Q_a$ ) = 0.0021 cfs
- High upstream river flow rate ( $Q_r$ ) = 2,400 cfs
- Low upstream river flow rate ( $Q_r$ ) = 68 cfs
- Average upstream river flow rate ( $Q_r$ ) = 630 cfs

Using the high, low and average river flow rates, the downstream benzene concentrations in the river are 0.028, 0.981 and 0.106 ppb. These calculated downstream benzene concentrations are at least one order of magnitude below the state of New Mexico Drinking Water Standard of 5 ppb.

### *3.5.5 Future Source Conditions - Worst Case Scenario*

The worst case scenario for future source conditions assumes that the free phase hydrocarbons observed in monitor wells in the southern portion of the site supply benzene directly to the river. The free-phase hydrocarbons in MW-10 was analyzed for BTEX compounds in August 1995. Benzene was not detected above the detection limits of 125,000  $\mu\text{g}/\text{kg}$  (125,000 ppb). Therefore, the benzene concentration of 125,000 ppb in MW-10 is assumed to be the "worst possible" concentration in groundwater that enters the river.

The same approach used in the current source conditions scenario is used for this scenario, except that the value used for the benzene concentration is 125,000 ppb. The final downstream benzene concentration in the river are 0.057, 2.02 and 0.218

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ppb at high, low and average river flow conditions, respectively. Even in the worst case scenario under low flow river conditions, the downstream benzene concentration in the river is below the state of New Mexico Drinking Water Standard of 5 ppb. The input parameters and calculated downstream benzene concentrations for the current and future source conditions are summarized in Table 18.

## 3.6 Surface Water

Chemical analyses of on-site soils document concentrations of metals and petroleum hydrocarbons in concentrations that exceed the recommended human health-based limits. Although New Mexico does not have specific standards for soils, EPA has published guidelines for screening lead in soil for residential land use. Based upon these criteria, on-site soils represent a potential threat to human health and the environment.

Because the site is secured by locked fences, the threat to human health and the environment from ingestion or dermal contact of site soils is extremely limited. The inhalation pathway is also limited because the impacted soil often is mixed with petroleum hydrocarbons, creating a surface that minimizes the formation of dust. Our study has concluded that stormwater runoff and groundwater flow from this site are the most likely routes of impact to the environment. Evaluation of the groundwater pathway is discussed in Sections 3.3, 3.5, and 3.6 of this report. Further evaluation of the surface water pathway is presented below.

The flow of surface water onto the site from upslope drainages is essentially uncontrolled. Cultural features such as the railroad and county road create a modification of natural flowpaths, but do not effectively divert flow toward or away from the site. Historically, flow from the site was controlled by four culverts to the Rio Grande. The northernmost culvert, Cul-4, is located just north of Area A. Cul-3 and Cul-2 are both in Area F, and Cul-1 drains Area G. Figure 18 shows the location of these culverts, the areas where impacts to soils are documented and our estimate of the drainage basins' boundaries at the site.

Table 19 presents off-site soils data obtained from the culverts and "background" locations up and downgradient of the site. Two soil samples were taken from Cul-3 and one from Cul-4. There is no record of any culvert samples from Cul-1 or Cul-2, nor are hydrocarbon analyses from these locations found in existing documents. Upgradient background samples are BG-2, MW-12, and NMEID.

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## 4.0 Conclusions

This site characterization at the Brickland Refinery site has determined the current extent and nature of hydrocarbon releases that occurred from approximately 1931 to 1959 and the metals concentrations that may be due to a combination of site activities and off-site metals refining operations. Constituents of concern have been confined to the site with the exception of low concentrations of BTEX in groundwater at MW-6S. The results of soil and groundwater sampling demonstrate that hydrocarbon releases from this site have not impacted water quality in the Rio Grande. Furthermore, contaminant transport modeling demonstrates that on-site hydrocarbon releases will not impact the Rio Grande in the future. The impact of periodic discharges of constituents of concern to the Rio Grande via a stormwater pathway has not been fully determined because there has not been enough runoff to accumulate water in the samplers placed in the culverts to provide a sample. However, this will not pose a problem as long as stormwater is contained on site.

Of the constituents of concern that have been detected to date, the following presented the greatest concerns and were critically examined in subsequent evaluations. GCL has critically evaluated the following constituents of concern that were detected on site:

### Soil

- TPH is not regulated specifically, and the regulated constituents of TPH are addressed on a compound-specific basis.
- BTEX has been detected to varying degrees in soils.
- Soil samples collected at the site were analyzed for arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Measured concentrations of arsenic, barium, chromium, and lead are above background ranges. However, TCLP testing and groundwater monitoring data demonstrate these elements have limited leaching potential and are highly unlikely to migrate to groundwater.
- The slight increase in background concentrations of some of the metals from the north to south of the site is probably due to the proximity of the Asarco smelter to the southern end of the site.

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- In general, lead and arsenic concentrations detected at the Brickland Refinery site are believed to have resulted at least in part from smelter operations.
- PAHs and phenols have been detected in soils at the site. None have been detected in off-site monitoring wells since the quarterly sampling program was initiated in December 1993.
- Hydrocarbon releases in on-site soils and groundwater are restricted to the southern two-thirds of the facility.
- Site security effectively breaks the pathway between the constituents of concern and receptors.

## Groundwater

- Hydrocarbons have been observed off site only in MW-6S. However, the absence of hydrocarbon constituents in all other off-site wells and river samples, with the exception of a single sample of total xylenes at the detection limit, indicate on-site hydrocarbon compound migration is attenuated on site by the interbedded silty/clayey sediments, the relatively flat, shallow water table, and/or natural biodegradation/dispersion. The minor amount of hydrocarbon migration that occurs is attenuated by biodegradation and dispersion.
- Benzene has been detected in groundwater at concentrations greater than health-based standards at only one off-site location (MW-6S). The other BTEX compounds have either not been detected or have been below WQCC standards in off-site monitoring wells.
- Free-phase hydrocarbon has been observed in monitoring well MW-10 and several well points in the immediate vicinity. The recent investigation determined that this free-phase hydrocarbon occurs locally in discontinuous pockets associated with thin, discontinuous, sand lenses. No free-phase hydrocarbons have been observed in off-site wells.

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- PAHs and phenols have been detected in the shallow aquifer at the site. None have been detected in off-site monitoring wells since the quarterly sampling program was initiated in December 1993.
- Intrinsic remediation of the constituents of concern and current land use effectively breaks the pathway between the constituents of concern and receptors.

## Surface Water

- No BTEX compounds have been detected in water samples collected from the Rio Grande at locations upgradient and downgradient from the site. Furthermore contaminant transport modeling has shown no significant risk of benzene entering the Rio Grande in the future.
- A monitoring program is required to determine if the surface water route completes a pathway between on-site constituents of concern and receptors.
- The gates to the three southernmost culverts are closed. There is no runoff in this area.

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**Table 1**  
**Monitoring Well and Well Point Elevation Data**  
**(feet amsl)**

Well ID	Ground Surface	Top of Casing	Top of Screen	Bottom of Screen
<i>Monitor Wells:</i>				
MW-1	3728.87	3730.57	3723.92	3712.17
MW-2	NA	3730.49	NA	NA
MW-3S	3727.81	3730.00	3723.50	3711.43
MW-3D	3727.93	3730.00	3707.00	3695.10
MW-4	3727.50	3728.86	3722.76	3711.76
MW-5	3728.29	3729.70	3725.20	3714.20
MW-6S	3728.46	3730.65	3724.05	3713.05
MW-6D	3728.59	3730.62	3703.12	3690.12
MW-7	3727.75	3728.96	3723.16	3711.50
MW-8	3727.72	3729.22	3724.52	3713.48
MW-9S	3728.24	3730.01	3724.31	3713.31
MW-9D	3728.59	3730.08	NA	NA
MW-10	3731.12	3732.54	3723.54	3712.54
MW-11	3729.84	3731.40	3721.60	3709.10
MW-12	3728.88	3730.35	3713.45	3701.45
MW-13	3729.53	3732.36	NA	NA
MW-14	3727.91	3730.46	3725.46	3709.86
MW-15	NA	3738.62	3724.92	3708.92
MW-16	3734.35	3736.78	3726.78	3710.78
MW-17	3731.98	3731.98	3726.58	3711.88
<i>Well Points:</i>				
WP-1	3730.15	3733.40	3726.99	3721.39
WP-2	3730.40	3731.65	3718.64	3713.04
WP-3	3728.50	3731.17	3726.77	3720.57
WP-4	3727.74	3731.85	3726.84	3721.14
WP-5	3727.58	3731.99	3726.92	3721.22
WP-6	3728.35	3731.70	3727.26	3721.56
WP-7	3730.70	3733.12	3720.71	3715.01
WP-8	3727.00	3729.67	3726.77	3722.07
WP-9	3727.24	3730.89	3725.87	3721.07
WP-10	3727.30	3731.37	3726.51	3722.81
WP-11	3727.49	3731.50	3726.61	3722.91
WP-12	3727.40	3731.35	3726.59	3722.89

Table 1 (Cont'd)  
Monitoring Well and Well Point Elevation Data  
(feet amsl)

Well ID	Ground Surface	Top of Casing	Top of Screen	Bottom of Screen
<i>Well Points (Cont'd):</i>				
WP-13	3726.72	3730.82	3725.39	3721.69
WP-14	3727.38	3730.50	3726.42	3722.72
WP-15	3729.57	3732.97	3726.31	3722.61
WP-16	3728.60	3730.25	3726.20	3722.50
WP-17	3727.93	3731.28	3726.21	3722.51
WP-18	3727.34	3728.56	3718.34	3714.64
WP-19	3728.29	3729.65	3724.59	3720.87
WP-20	3727.60	3731.46	3726.57	3722.87
WP-21	3727.38	3730.38	3725.90	3722.20
WP-22	3727.50	3728.85	3718.70	3715.00
WP-23	3728.00	3729.11	3724.03	3720.33
WP-24	3727.40	3731.75	3726.77	3721.07
WP-25	3730.48	3733.54	3721.69	3715.99
WP-26S	3730.40	3732.44	3727.15	3721.65
WP-26D	3730.30	3733.28	3717.90	3714.40
WP-27S	3732.77	3736.82	3726.47	3720.97
WP-27D	3732.77	3736.86	3725.46	3721.96
WP-28	3727.39	3731.62	3726.39	3722.79
WP-29	3726.97	3731.19	3725.97	3722.37
WP-30	3729.60	3733.41	3725.20	3719.50
WP-31	3734.47	3737.21	3726.57	3720.97
WP-32	3735.30	3736.80	3726.30	3722.70
WP-33	3729.00	3732.74	3722.65	3716.95
WP-34	3727.20	3731.53	3726.34	3720.74
WP-35	3727.08	3728.71	3723.64	3720.04
WP-36	3726.87	3729.52	3724.50	3720.90
WP-37	3727.70	3730.13	3725.05	3721.45

Notes:

NA = Data not available.

amsl = Above mean sea level.

**Table 2**  
**Water Level Elevations in Monitoring Wells**  
 (feet amsl)

Well ID	Jul. 93	Dec. 93	Mar. 94	Jul. 94	Sept. 94	Dec. 94	Mar. 95	Jun. 95	Sept. 95
MW-1	3725.78	3724.30	3725.27	3726.54	3725.37	3724.35	NM	3726.66	NM
MW-2	NM	NM	3726.39	3726.54	3725.89	3723.97	NM	3726.81	NM
MW-3S	3725.29	3723.27	3725.20	3725.87	3724.50	3723.44	3725.35	3725.68	3724.98
MW-3D	3725.22	3723.30	3725.10	3725.78	3724.42	3723.35	3725.26	3725.75	3724.97
MW-4	3725.21	3723.59	3725.36	3725.56	3724.68	3723.64	3725.56	3725.66	3725.40
MW-5	3725.11	3723.59	3725.30	3725.88	3724.70	3723.65	3725.40	3725.86	3725.39
MW-6S	3725.08	3723.78	3724.85	3725.55	3724.20	3723.03	3725.05	3725.53	3724.63
MW-6D	3725.00	3723.75	3724.82	3725.57	3724.22	3723.00	3725.02	3725.48	3724.57
MW-7	3725.16	3723.72	3725.16	3725.89	3724.46	3723.16	3725.36	3725.32	3725.23
MW-8	3725.10	3723.42	3725.12	3725.77	3724.49	3723.45	3725.42	3725.74	3724.33
MW-9S	3724.84	3723.52	3724.56	3725.29	3723.91	3722.81	3724.81	3725.21	3725.52
MW-10	P	P	P	P	P	P	P	P	NM
MW-11	3724.91	3722.90	3725.10	3725.75	P	3723.40	3725.35	3725.86	3724.98
MW-12	3726.09	3724.91	3726.45	3727.05	3725.70	3723.65	NM	3727.15	3726.39
MW-13	3725.22	NM	NM	3725.82	3724.71	3724.44	NM	3726.05	NM
MW-14	-	-	NM	3726.03	3724.61	3723.58	3725.56	3726.01	3725.31
MW-15	-	-	NM	3725.62	3724.28	3723.19	3724.97	3725.58	3724.87
MW-16	-	-	NM	3725.43	3724.06	3722.93	3724.88	3725.44	3724.54
MW-17	-	-	NM	3725.90	3724.46	3723.36	3725.38	3726.82	3726.05

Notes:

- NM = Not measured.
- amsl = Above mean sea level.
- P = Product observed.
- = Well was not yet drilled.

Table 3

## Background Concentrations of Metals in Soil

Sample Location	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
BG-1 (GCL 1996)	42	102	9.2	11	292	0.12	ND	ND
BG-2 (GCL 1996)	14	102	1.8	8	103	ND	ND	ND
NMEID (Lab SLD)	NA	77	NA	9	150	ND	NA	ND
NMEID (Lab AT)	71	NA	4.2	3	182	0.05	NA	1.2
NMEID (Lab IT)	NA	NA	NA	4.3	160	NA	0.8	NA
USGS Western US	<.01 - 97	NR	NR	3 - 2000	<10 - 700	<.01 - 4.6	NR	NR
Eder	<1.4	NA	0.9 - 5.5	7.5 - 23	6 - 270	<0.02 - 0.11	<1.3	<0.25 - 1.2

All Units are mg/Kg

NA = Not Analyzed

NR = Not Recorded

ND = Not Detected

N = Matrix spike out of acceptable range

\* = Digested duplicate out of 20% RPD (relative percent difference)

S = Performed by method of standard additions (MSA)

NMEID background data from **NMEID Listing Site Inspection, January 16, 1990.**

USGS Western US background data from **Shaklette, H.T. et. al, 1971**

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 4a

VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES  
AREA A - UNITS (UG/KG)

<u>Compound</u>	<u>A-TP-65</u>
Benzene	ND
Ethylbenzene	ND
Toluene	ND
Xylenes	500
Non-Target Total BTEX Compounds	<u>500</u>
Total	51,000

NOTES:

ND - Not Detected

J - Estimated concentration

B - Detected in associated lab blank

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 4b

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "A"

<u>Parameter</u>	<u>A-TP-63</u>	<u>A-TP-64</u>	<u>A-TP-65</u>	<u>A-TP-87</u>	<u>A-TP-88</u>	<u>A-TP-89</u>	<u>A-TP-90</u>	<u>A-HA-5</u>
Mercury	NA	NA	0.06UN	NA	NA	NA	NA	NA
Silver	NA	NA	0.6U	NA	NA	NA	NA	NA
Cadmium	NA	NA	2.9	NA	NA	NA	NA	NA
Chromium	NA	NA	13.5	NA	NA	NA	NA	NA
Copper	169N	151N	112N	96.9N	74.5N	58.3N	107N	5.9N
Nickel	NA	NA	10.2	NA	NA	NA	NA	NA
Zinc	NA	NA	101	NA	NA	NA	NA	NA
Arsenic	NA	NA	19.8*NS	NA	NA	NA	NA	NA
Lead	284	270	139	NA	NA	NA	NA	15.4

NOTES:

- NA - Not analyzed
- U - Undetected at <Instrument Detection Limit (IDL)
- W - Analytical spike recovery out of range
- B - Undetected, <Contract Required Quantification Limit (CRQL) but > Instrument Detection Limit (IDL)
- E - Matrix interference
- N - Matrix spike out of acceptable range
- S - Performed by Method of Standard Additions (MSA)
- + - MSA correlation coefficient <.995
- \* - Digested duplicate out of 20% Relative Percent Difference (RPD)

Units - (mg/kg) for all analytes

Range of site background metals levels (mg/kg)

Mercury	<0.02-0.11
Silver	<0.25-1.2
Cadmium	0.9-5.5
Chromium	7.5-23
Copper	6-140
Nickel	5-10
Zinc	21-180
Arsenic	<1.4
Lead	6-270

OLD BRICKLAND REFINERY SITE  
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Table 5a

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "B"

<u>Parameter</u>	<u>B-TP-83</u>	<u>B-TP-84</u>	<u>B-TP-85</u>	<u>B-TP-86</u>	<u>B-HA-1</u>	<u>B-HA-2</u>	<u>B-HA-2</u>	<u>B-HA-4</u>
Mercury	NA	NA	NA	NA	NA	NA	NA	0.41N
Silver	NA	NA	NA	NA	1.4	177	1.8	4.9
Cadmium	NA	NA	NA	NA	NA	NA	NA	4.7*N
Chromium	NA	NA	NA	NA	NA	NA	NA	860
Copper	NA	NA	NA	NA	390*N	35.5*N	37.2*N	1370*N
Nickel	NA	NA	NA	NA	NA	NA	NA	5.4
Zinc	NA	NA	NA	NA	251N	32.3N	30.9N	178N
Arsenic	NA	NA	NA	NA	NA	NA	NA	5.98*NS
Lead	NA	NA	NA	NA	427N	60N	77N	2830N

NOTES:

- NA - Not analyzed
  - U - Undetected at <IDL
  - W - Analytical spike recovery out of range
  - B - Undetected, <CRQL but >IDL
  - E - Matrix interference
  - N - Matrix spike out of acceptable range
  - S - Performed by MSA
  - + - MSA correlation coefficient <.995
  - \* - Digested duplicate out of 20% RPD
- Units - (mg/kg) for all analytes

OLD BRICKLAND REFINERY SITE  
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Table 6a

VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES  
AREA C - UNITS (UG/KG)

<u>Compound</u>	<u>C-TP-1-2</u>	<u>C-TP-2-2</u>	<u>C-TP-4</u>
Benzene	ND	ND	14,700
Ethylbenzene	ND	ND	75,500
Toluene	ND	ND	ND
Xylenes	ND	ND	125,800
Non-Target Total BTEX Compounds	<u>ND</u>	<u>ND</u>	<u>216,000</u>
Total	ND	ND	410,900

NOTES:

- ND - Not detected
- J - Estimated concentration
- B - Detected in associated lab blank

OLD BRICKLAND REFINERY SITE  
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Table 6b

SEMIVOLATILE ORGANICS IN SOIL SAMPLES - AREA "C"  
(ug/kg)

SEMIVOLATILE ORGANICS	C-TP-8-5	C-TP-1-2 (1)	C-TP-2-2
TARGET COMPOUNDS			
Naphthalene	2900	87 J (3)	ND
2-Methylnaphthalene	25300	48 J	ND
Phenanthrene	19800	81 J	ND
Anthracene	6100	ND	ND
Dibenzofuran	5200	45 J	ND
Fluorene	6700	87 J	ND
2,4-Dinitrotoluene	11200	ND	ND
Pyrene	18800	ND	ND
4-Nitrophenol	ND (2)	ND	ND
Acenaphthene	3200	34 J	ND
Chrysene	5500	ND	ND
Benzo(a)anthracene	4400	ND	ND
Acenaphthylene	ND	ND	ND
4-Chloroaniline	1400	ND	ND
O-Nitrotoluene	ND	ND	ND
M-Nitrotoluene	ND	ND	ND
Nitrobenzene	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND
Fluoranthene	2500	ND	ND
Benzo(a)pyrene	1600	ND	ND
2-Chloronaphthalene	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND
Isophorone	ND	ND	ND
4,6-Dinitro-2-methylphenol	1700	ND	ND
Benzo(k)fluoranthene	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND
Total	116300	382 J	ND
NON-TARGET COMPOUNDS			
Total	1117700	42380	12520

NOTES:

(1) - samples suffixed with "-2" collected in July 1990.

(2) - not detected.

(3) - value is estimated because compound is present < CRQL.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 6c

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "C"

<u>Parameter</u>	<u>C-TP-1</u>	<u>C-TP-2</u>	<u>C-TP-3</u>	<u>C-TP-4</u>	<u>C-TP-5</u>	<u>C-TP-6</u>	<u>C-TP-7</u>	<u>C-TP-8</u>
Mercury	NA	0.06UN						
Silver	NA	2.9						
Cadmium	2.0	1.3	9.0	0.6	16.5	3.7	19.0	0.2B
Chromium	NA	7.5						
Copper	25.5	28.0	184	21.3	280	142	197	4.8
Nickel	NA	10.2						
Zinc	51.9	39.8	159	65.4	367	120	221	17.1
Arsenic	19.7	14.7	43.3	25.8*N+	129	14.7	50.9	5.0B*N+
Lead	121	98.1	278	22.7	683	166	328	5.0

NOTES:

- NA - Not analyzed
  - U - Undetected at <IDL
  - W - Analytical spike recovery out of range
  - B - Undetected, <CRQL but >IDL
  - E - Matrix interference
  - N - Matrix spike out of acceptable range
  - S - Performed by MSA
  - + - MSA correlation coefficient <.995
  - \* - Digested duplicate out of 20% RPD
- Units - (mg/kg) for all analytes

OLD BRICKLAND REFINERY SITE  
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Table 7a  
VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES - AREA "D"  
(ug/kg)

COMPOUND	D-TP-3-2	D-TP-7-2	D-TP-51	D-TP-52	D-TP-53	D-TP-54
Benzene	900 J	2000 B	2,300	5,100	13,700	17,900
Ethylbenzene	44,600	1,300	28,800	16,700	1,300	3,400
Toluene	ND	ND	ND	ND	ND	ND
Xylenes	9,200	ND	25,000	ND	ND	3,000
Total BTEX	54,700	3,300	56,100	21,800	15,000	24,300
NON-TARGET COMPOUNDS						
Total	44,500	15,900	282,200	205,100	338,600	278,000

NOTES:

ND - not detected in sample.

J - Estimated concentration.

B - Detected in associated lab blank.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 7b

SEMIVOLATILE ORGANICS IN SOIL SAMPLES - AREA "D"  
(ug/kg)

SEMIVOLATILE ORGANICS	B-5	B-9	B-13	B-22	D-TP-51	D-TP-3-2 (1)	D-TP-7-2	MW-5-SS-04
TARGET COMPOUNDS								
Naphthalene	3000	1800	1270	13800	33000	16000 J (3)	21000	4300
2-Methylnaphthalene	8400	4200	2850	18500	96000	ND	91000	21600
Phenanthrene	200	1100	150	400	2000	2000 J	ND	ND
Anthracene	200	1100	150	400	2000	ND	ND	ND
Dibenzofuran	200	300	160	300	3300	3300 J	ND	ND
Fluorene	200	400	150	400	2200	ND	ND	ND
2,4-Dinitrotoluene	300	400	120	500	ND	ND	ND	ND
Pyrene	ND (2)	900	ND	200	ND	ND	ND	ND
4-Nitrophenol	200	500	100	200	ND	ND	ND	2500
Acenaphthene	ND	ND	50	ND	ND	ND	ND	ND
Chrysene	ND	400	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	400	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	100	ND	ND	ND	ND	ND	ND
4-Chloroaniline	400	100	ND	500	3400	ND	ND	ND
O-Nitrotoluene	600	ND	30	ND	ND	ND	ND	4100
M-Nitrotoluene	400	100	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	100	130	ND	4400	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	60	200	ND	ND	ND	ND
Fluoranthene	ND	100	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	600	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	2000	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	1980	ND	1300	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	60	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	100	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND
Total	14100	12700	7260	35400	149600	21300 J	112000	32500
NON-TARGET COMPOUNDS								
Total	223000	72500	50280	228300	2275000	1211600	1707000	619100

NOTES:

- (1) - samples suffixed with "-2" collected in July 1990.
- (2) - not detected.
- (3) - value is estimated because compound is present < CRQL.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 7c

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "D"

<u>Parameter</u>	<u>B-1</u>	<u>B-2</u>	<u>B-3</u>	<u>B-4</u>	<u>B-5</u>	<u>B-6</u>	<u>B-7</u>	<u>B-8</u>
Mercury	NA							
Silver	NA							
Cadmium	44.4*N	13.8*N	4.6*N	8.7*N	0.2U*N	8.2*N	6.4*N	1.8U
Chromium	NA							
Copper	951*N	422*N	79.6*N	202*N	1.28*N	251*N	72*N	68.8
Nickel	NA							
Zinc	887N	683N	68.3N	168N	11.1N	236N	97.9N	45.7
Arsenic	169	95.5	13.6	51.0	4.4	58.4	21.7	24.9*NS
Lead	1500N	913N	54.9N	287N	6.0N	65.9N	202N	62.2

<u>Parameter</u>	<u>B-9</u>	<u>B-10</u>	<u>B-11</u>	<u>B-12</u>	<u>B-13</u>	<u>B-14</u>	<u>B-15</u>	<u>B-16</u>
Mercury	NA	NA	NA	NA	NA	NA	NA	NA
Silver	0.56U	6.3U	1.3B	0.7U	5.1U	0.6U	10.3	1.2
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	NA
Copper	2.1B	119	122	22.6	216	81.1	7.18	71.8
Nickel	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	11.2B*NS	22.0	21.7	11.1	55.6	14.1*NS	10.3B*NS	13.8
Lead	5.9	201	190	34.8	516	100	134	132

OLD BRICKLAND REFINERY SITE  
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Table 8a

VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES - AREA "E"  
(ug/kg)

COMPOUND	E-TP-4-2	E-TP-5-2	E-TP-6-2	E-TP-8-2	E-TP-20
Benzene	3,100	1,400	1,500 B	ND	19,600
Ethylbenzene	4,800	8,300	4,100	ND	33,600
Toluene	100	ND	ND	ND	ND
Xylenes	1,700	5,500	3,100	ND	ND
Total BTEX	9,700	15,200	8,700	ND	53,200
NON-TARGET COMPOUNDS					
Total	37,200	43,000	67,910	8,793	1,952,700

COMPOUND	E-TP-22	E-TP-27	E-TP-32
Benzene	15,700	11,900	36,800
Ethylbenzene	30,100	18,300	45,800
Toluene	ND	ND	13,400
Xylenes	119,900	15,200	196,000
Total BTEX	165,700	45,400	292,000
NON-TARGET COMPOUNDS			
Total	1,253,300	722,600	670,100

NOTES:

ND - not detected in sample.

J - Estimated concentration.

B - Detected in associated lab blank.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 8b

SEMIVOLATILE ORGANICS IN SOIL SAMPLES - AREA "E"  
(ug/kg)

SEMIVOLATILE ORGANICS	E-TP-9	E-TP-15	E-TP-21	E-TP-22	E-TP-25	E-TP-29	E-TP-31	E-TP-4-2 (1)	E-TP-5-2	E-TP-6-2	E-TP-8-2
TARGET COMPOUNDS											
Naphthalene	5900	32000	46000	ND	13000	2000	3400	41000	ND	14000	8000
2-Methylnaphthalene	29500	154000	150000	22000	41000	19000	10200	153000	ND	54000	32000
Phenanthrene	9600	ND	3000	12000	5000	27000	ND	ND	ND	ND	ND
Anthracene	ND (2)	ND	3000	2000	1000	5000	ND	ND	ND	ND	ND
Dibenzofuran	2400	ND	2000	1000	4000	1000	300	ND	ND	ND	ND
Fluorene	3700	ND	3000	2000	3000	5000	200	ND	ND	ND	ND
2,4-Dinitrotoluene	2000	ND	3000	3000	7000	ND	500	ND	ND	ND	ND
Pyrene	3900	ND	ND	11000	2000	18000	ND	ND	ND	ND	ND
4-Nitrophenol	4500	ND	ND	ND	1000	ND	500	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	1000	1000	1000	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	4000	ND	1000	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	3000	ND	1000	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	1000	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	3100	8000	ND	ND	3000	ND	400	ND	ND	ND	ND
O-Nitrotoluene	2700	ND	ND	ND	ND	ND	900	ND	ND	ND	ND
M-Nitrotoluene	ND	4000	6000	ND	ND	ND	400	ND	ND	ND	ND
Nitrobenzene	ND	15000	11000	ND	1000	ND	900	ND	ND	ND	ND
N-Nitrosodiphenylamine	3800	ND	ND	ND	2000	4000	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	2000	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	1000	2000	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	3000	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	2300	ND	ND	ND	ND						
Isophorone	ND	5000	ND	ND	ND	ND	4200	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND							
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	1000	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	1000	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND							
Total	73400	218000	227000	65000	85000	93000	21900	194000	ND	66000	40000
NON-TARGET COMPOUNDS											
Total	1016100	1375000	7592000	2293000	932000	962000	217700	2492000	17260	904000	1086000

NOTES:

(1) - samples suffixed with "-2" collected in July 1990.

(2) - not detected.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 8c

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "E"

<u>Parameter</u>	<u>E-TP-9</u>	<u>E-TP-10</u>	<u>E-TP-11</u>	<u>E-TP-12</u>	<u>E-TP-13</u>	<u>E-TP-14</u>	<u>E-TP-15</u>	<u>E-TP-16</u>
Mercury	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	NA	NA	NA	NA	132	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	173	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	23.0*NS	33.8*NS	14.0	20.6*NS	10.6B*NW	5.6B*NW	7.7B*NW	9.6B*NS
Lead	NA	NA	NA	NA	NA	NA	NA	NA

<u>Parameter</u>	<u>E-TP-17</u>	<u>E-TP-18</u>	<u>E-TP-19</u>	<u>E-TP-20</u>	<u>E-TP-21</u>	<u>E-TP-21</u>	<u>E-TP-22</u>	<u>E-TP-23</u>
Mercury	NA							
Silver	NA	NA	NA	NA	4.2	NA	NA	NA
Cadmium	NA	NA	NA	NA	0.2U	NA	NA	NA
Chromium	NA							
Copper	NA							
Nickel	NA							
Zinc	NA							
Arsenic	NA							
Lead	NA							

<u>Parameter</u>	<u>E-TP-25</u>	<u>E-TP-26</u>	<u>E-TP-27</u>	<u>E-TP-28</u>	<u>E-TP-29</u>	<u>E-TP-30</u>	<u>E-TP-31</u>	<u>E-TP-32</u>
Mercury	0.15N	0.16N	0.76N	NA	NA	NA	NA	NA
Silver	NA							
Cadmium	NA							
Chromium	NA	NA	NA	NA	5.2	NA	NA	NA
Copper	39.1	218	26.9	144*N	53.9*N	71.5*N	9.6B*N	123*N
Nickel	NA							
Zinc	69.8	50.6	48.4	NA	NA	NA	NA	NA
Arsenic	9.0B*NS	33.2*NS	5.4B*N	NA	NA	NA	NA	NA
Lead	93.5	139000	71.5	160*	88.4*	184*	29.5*	686

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 9a

VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES - AREA "F"  
(ug/kg)

COMPOUND	F-TP-9-2	F-TP-10-2	F-TP-34	F-TP-38	F-TP-42
Benzene	35,600	18,700	6,500	498,600	1,600
Ethylbenzene	111,400	92,700	18,100	3,800	5,600
Toluene	ND	ND	1,900	5,200	400
Xylenes	2,600	120,200	20,100	ND	7,000
Total BTEX	149,600	231,600	46,600	507,600	14,600
NON-TARGET COMPOUNDS					
Total	1,080,000	167,500	150,100	1,665,000	81,600

COMPOUND	F-TP-45	F-TP-48	F-TP-61	F-TP-91
Benzene	26,700	76,900	16,000	ND
Ethylbenzene	159,900	157,800	2,500	ND
Toluene	300	174,900	ND	ND
Xylenes	16,300	944,000	1,800	ND
Total BTEX	203,200	410,900	20,300	ND
NON-TARGET COMPOUNDS				
Total	260,700	5,438,600	416,300	ND

NOTES:

ND - Not detected in sample.

J - Estimated concentration.

B - Detected in associated lab blank.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 9b

SEMIVOLATILE ORGANICS IN SOIL SAMPLES - AREA "F"  
(ug/kg)

SEMIVOLATILE ORGANICS	F-TP-39	F-TP-40	F-TP-48	F-TP-50	F-TP-58	F-TP-9-2 (1)	F-TP-10-2
TARGET COMPOUNDS							
Naphthalene	15800	17700	15700	6500	9100	1100	53900
2-Methylnaphthalene	113900	60400	27700	59600	17800	3600	73700
Phenanthrene	10000	1800	22000	10000	4700	140	ND
Anthracene	9900	1700	3400	1500	800	ND	ND
Dibenzofuran	6700	1100	ND	2400	1400	ND	ND
Fluorene	8000	1300	4100	4700	2100	120	ND
2,4-Dinitrotoluene	7800	1400	1800	3000	2500	ND	ND
Pyrene	1600	500	6400	2300	2800	ND	ND
4-Nitrophenol	4900	1200	ND	5200	400	ND	ND
Acenaphthene	4800	500	ND	3400	500	ND	ND
Chrysene	ND (2)	ND	ND	ND	500	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	500	ND	ND
Acenaphthylene	2300	500	ND	1500	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	500	ND	ND
O-Nitrotoluene	4100	ND	2000	ND	ND	ND	ND
M-Nitrotoluene	ND	2000	ND	ND	1000	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	800	5300	ND	2100	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	1900	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	600	ND	ND
Isophorone	ND	2600	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	600	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND
Total	189800	93500	90300	100100	47900	4960	127600
NON-TARGET COMPOUNDS							
Total	2669300	768400	730500	872000	542000	35870	2747400

NOTES:

(1) - samples suffixed with "-2" collected in July 1990.

(2) - not detected.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 9c

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "F"

<u>Parameter</u>	<u>F-TP-33</u>	<u>F-TP-34</u>	<u>F-TP-35</u>	<u>F-TP-36</u>	<u>F-TP-37</u>	<u>F-TP-38</u>	<u>F-TP-39</u>	<u>F-TP-40</u>
Mercury	NA							
Silver	NA							
Cadmium	NA							
Chromium	NA	NA	NA	NA	NA	NA	13.2	NA
Copper	163*N	233*N	585*N	162*N	172*N	33.1*N	270*N	132*N
Nickel	NA							
Zinc	130	158	252	140	NA	NA	NA	NA
Arsenic	NA							
Lead	180*	377000*	4860*	2470*	1090*	32.8*	890*	899*
<u>Parameter</u>	<u>F-TP-41</u>	<u>F-TP-42</u>	<u>F-TP-43</u>	<u>F-TP-44</u>	<u>F-TP-45</u>	<u>F-TP-46</u>	<u>F-TP-47</u>	<u>F-TP-48</u>
Mercury	0.06UN	1.9N	0.06UN	0.05UN	NA	NA	NA	NA
Silver	NA	NA	NA	NA	NA	NA	8.1	0.9B
Cadmium	NA							
Chromium	NA	NA	NA	NA	NA	NA	45.4	34.3
Copper	310*N	247	174*N	9.2*N	61.5*N	72*N	647*N	422*N
Nickel	NA	NA	NA	NA	NA	NA	41.4	39.6
Zinc	NA	NA	NA	NA	376	115	1710	277
Arsenic	NA	NA	NA	NA	NA	NA	35.3	NA
Lead	1340	1400	764*	8.2*	268*	564*	628*	450*
<u>Parameter</u>	<u>F-TP-49</u>	<u>F-TP-50</u>	<u>F-TP-55</u>	<u>F-TP-56</u>	<u>F-TP-57</u>	<u>F-TP-58</u>	<u>F-TP-59</u>	<u>F-TP-60</u>
Mercury	NA	NA	NA	NA	NA	NA	0.26N	2.8N
Silver	6.1	7.5	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	25.4	17.4
Chromium	22.6	47.2	NA	NA	NA	NA	NA	NA
Copper	126*N	390*N	238N	763N	20.8N	153N	2230N	572N
Nickel	42.9	19.2	NA	NA	NA	NA	NA	NA
Zinc	845	525	NA	NA	NA	NA	2370	1380
Arsenic	NA							
Lead	488*	676*	NA	NA	NA	NA	NA	NA

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 10a

VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES - AREA "G"  
(ug/kg)

COMPOUND	G-TP-11-2	G-TP-12-2	G-TP-13-2	G-TP-14-2	G-TP-15-2
Benzene	42	54,000	ND	ND	49
Ethylbenzene	316	79,000	ND	ND	63
Toluene	32	ND	ND	ND	ND
Xylenes	347	120,000	ND	ND	94
Total BTEX	737	253,000	ND	ND	206
NON-TARGET COMPOUNDS					
Total	14,700	167,500	ND	11,506	11,365

COMPOUND	G-TP-16-2	G-TP-68	G-TP-70	G-TP-77	G-TP-80
Benzene	34	200	1,900	500	ND
Ethylbenzene	140	ND	10,800	3,200	300
Toluene	ND	ND	8,900	200	ND
Xylenes	290	ND	21,000	8,000	700
Total BTEX	464	200	42,600	11,900	1,000
NON-TARGET COMPOUNDS					
Total	1,155	455,200	43,000	136,400	17,700

COMPOUND	H-TP-81
Benzene	7,500
Ethylbenzene	45,300
Toluene	16,000
Xylenes	77,600
Total BTEX	146,400
NON-TARGET COMPOUNDS	
Total	439,100

NOTES:

ND - Not detected in sample.

J - Estimated concentration.

B - Detected in associated lab blank.

H-TP-81 sample was collected in area "G", but noted as "H".

Table 10b

SEMIVOLATILE ORGANICS IN SOIL SAMPLES - AREA "G"  
 (ug/kg)

SEMIVOLATILE ORGANICS	G-TP-66	G-TP-68	G-TP-68-1 (5)	G-TP-80 (3)	G-TP-11-2 (1)	G-TP-12-2
TARGET COMPOUNDS						
Naphthalene	14000	4000	11000	ND	6500 J (3)	11140
2-Methylnaphthalene	40000	16400	41000	ND	19900 J	17800
Phenanthrene	12800	11800	8000	ND	11800	1170 J
Anthracene	2400	2000	1000	ND	3300 J	200 J
Dibenzofuran	3700	1000	4000	ND	ND	530 J
Fluorene	5800	3400	4000	ND	4700 J	600 J
2,4-Dinitrotoluene	ND (2)	5400	6000	ND	ND	ND
Pyrene	5200	6300	2000	ND	6400 J	430 J
4-Nitrophenol	600	1000	1000	ND	ND	ND
Acenaphthene	1700	1000	1000	ND	ND	ND
Chrysene	1100	1900	800	ND	ND	ND
Benzo(a)anthracene	900	1900	800	ND	ND	ND
Acenaphthylene	1000	400	ND	ND	ND	ND
4-Chloroaniline	800	ND	1000	ND	ND	ND
O-Nitrotoluene	ND	500	2000	ND	ND	ND
M-Nitrotoluene	1000	ND	4000	ND	ND	ND
Nitrobenzene	ND	1500	1000	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND
Fluoranthene	600	700	ND	ND	ND	ND
Benzo(a)pyrene	ND	1200	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	800	1200	900	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	500	5700	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	500	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	2200	6000	ND	ND	ND
Total	92900	70000	95500	ND	52600	31670
NON-TARGET COMPOUNDS						
Total	953300	1305000	1286900	792000	1262500	219440

NOTES:

- (1) - samples suffixed with "-2" collected in July 1990.
- (2) - not detected.
- (3) - value is estimated if compound is present < CRQL.
- (4) - sample was collected in area "G", but noted as "H".
- (5) - samples G-TP-68 and G-TP-68-1 were collected at different depths.

OLD BRICKLAND REFINERY SITE  
SUNLAND PARK, NEW MEXICO

Table 10c

SELECTED METALS ANALYSIS  
FROM UNIQUE SOIL SAMPLES IN AREA "G"

<u>Parameter</u>	<u>G-TP-66</u>	<u>G-TP-67</u>	<u>G-TP-68</u>	<u>G-TP-69</u>	<u>G-TP-70</u>	<u>G-TP-71</u>	<u>G-TP-72</u>	<u>G-TP-73</u>
Mercury	NA							
Silver	NA							
Cadmium	36.7	3.3	0.4B	1.5	NA	NA	NA	NA
Chromium	20.0	16.4	16.3	14.2	97.0	16.7B	17.6	17.6
Copper	992N	101N	7.1N	38.8N	20100*N	18900*N	412*N	17.6*N
Nickel	14.5	9.9	9.2	8.2	41.2	13U	10.4	12.5
Zinc	985	671	33.7	80.9	NA	NA	NA	NA
Arsenic	NA							
Lead	1260	336	19.6	78.3	34900N	18600N	1700N	25.9N
<u>Parameter</u>	<u>G-TP-74</u>	<u>G-TP-75</u>	<u>G-TP-76</u>	<u>G-TP-77</u>	<u>G-TP-78</u>	<u>G-TP-79</u>	<u>G-TP-80</u>	<u>H-TP-81</u>
Mercury	NA	NA	NA	0.06UN	NA	NA	NA	NA
Silver	NA	NA	NA	2.5	NA	NA	NA	NA
Cadmium	2U	24.1	1.5	0.3B*N	NA	NA	NA	NA
Chromium	NA	NA	NA	16.9	18.3	16.9	13.7	NA
Copper	19.6B*N	693*N	199*N	13.0*N	NA	NA	NA	NA
Nickel	23.5B	9.1	NA	7.7	NA	NA	NA	NA
Zinc	NA	NA	79.2N	41.3N	NA	NA	NA	NA
Arsenic	NA	NA	NA	29.9*NS	NA	NA	NA	NA
Lead	14.5N	1200N	2090N	18.4N	NA	NA	NA	NA
<u>Parameter</u>	<u>H-TP-82</u>	<u>G-SS-7</u>	<u>G-SS-8</u>	<u>G-SS-9</u>				
Mercury	NA	0.03	0.15	0.09				
Silver	NA	NA	NA	NA				
Cadmium	NA	NA	NA	NA				
Chromium	NA	9.5	7.0	89.5				
Copper	NA	3100	2000	800				
Nickel	NA	16	12	8.5				
Zinc	NA	NA	NA	NA				
Arsenic	NA	NA	NA	NA				
Lead	NA	3800	24000	800				

Table 11

## Results of Comparative Metals Sampling

Sample Location	Arsenic		Barium		Cadmium		Chromium		Lead		Mercury		Selenium		Silver	
	Eder 1990	GCL 1996														
B-1	169	11	NA	146	44.4*N	ND	NA	13	1500N	154	NA	ND	NA	ND	NA	ND
B-HA-4	5.98*NS	10	NA	142	4.7*N	0.9	860	9	2830N	75	0.41N	ND	NA	ND	4.9	ND
E-TP-26	32.2NS	31	NA	167	NA	2.5	NA	12	139000	18300	0.16N	4.48	NA	ND	NA	ND
E-SS-4	NA	30	NA	95	NA	4.8	75	14	1000	1170	ND	1.66	NA	ND	NA	ND
F-TP-34	NA	15	NA	165	NA	1	NA	13	377000*	83	NA	0.11	NA	ND	NA	ND
F-SS-6	NA	58	NA	101	NA	11.9	8	13	260	1500	0.1	0.31	NA	10	NA	ND
G-SS-8	NA	13	NA	119	NA	0.8	7.0	9	24000	36	0.15	ND	NA	10	NA	3
G-TP-70	NA	65	NA	533	NA	8.6	97.0	104	34900N	7200	NA	2.23	NA	20	NA	ND

## Background

BG-1 (GCL 1996)	42	102	9.2	11	292	0.12	ND	ND
BG-2 (GCL 1996)	14	102	1.8	8	103	ND	ND	ND
NMEID (Lab SLD)	NA	77	NA	9	150	ND	NA	ND
NMEID (Lab AT)	71	NA	4.2	3	182	0.05	NA	1.2
NMEID (Lab IT)	NA	NA	NA	4.3	160	NA	0.8	NA
USGS Western US	<.01 - 97	NR	NR	3 - 2000	<10 - 700	<.01 - 4.6	NR	NR
Eder	<1.4	NA	0.9 - 5.5	7.5 - 23	6 - 270	<0.02 - 0.11	<1.3	<0.25 - 1.2

All Units are mg/Kg

NA = Not Analyzed

NR = Not Recorded

ND = Not Detected

N = Matrix spike out of acceptable range

\* = Digested duplicate out of 20% RPD (relative percent difference)

S = Performed by method of standard additions (MSA)

NMEID background data from NMEID Listing Site Inspection, January 16, 1990.

USGS Western US background data from Shaklette, H.T. et. al, 1971

Table 12  
Free Phase Hydrocarbon Thickness in Monitoring Wells and Well Points  
(feet)

Well ID	Sept. 93	Dec. 93	Mar. 94	Jul. 94	Sept. 94	Dec. 94	Mar. 95	Jun. 95
MW-1	-	-	NP	NP	NP	NP	-	NP
MW-2	-	-	NP	NP	NP	NP	-	NP
MW-3S	-	-	NP	NP	NP	NP	NP	NP
MW-3D	-	-	NP	NP	NP	NP	NP	NP
MW-4	-	-	NP	NP	NP	NP	NP	NP
MW-5	-	-	NP	NP	NP	NP	NP	NP
MW-6S	-	-	NP	NP	NP	NP	NP	NP
MW-6D	-	-	NP	NP	NP	NP	NP	NP
MW-7	-	-	NP	NP	NP	NP	NP	NP
MW-8	-	-	NP	NP	NP	NP	NP	NP
MW-9S	-	-	NP	NP	NP	NP	NP	NP
MW-10	5.42	3.58	-	3.45	2.40	2.46	-	2.29
MW-11	-	-	NP	NP	0.05	-	-	0.16
MW-12	-	-	NP	NP	NP	NP	-	NP
MW-13	-	-	-	NP	NP	NP	-	NP
MW-14	-	-	-	NP	NP	NP	NP	NP
MW-15	-	-	-	NP	NP	NP	NP	NP
MW-16	-	-	-	NP	NP	NP	NP	NP
MW-17	-	-	-	NP	NP	NP	NP	NP
WP-1	-	-	-	NP	NP	NP	-	0.16
WP-2	-	-	-	NP	NP	NP	-	NP
WP-3	-	-	-	NP	NP	NP	-	NP
WP-4	-	-	-	NP	NP	NP	-	NP
WP-5	-	-	-	NP	NP	NP	-	NP
WP-6	-	-	-	NP	NP	NP	-	NP
WP-7	-	-	-	NP	NP	NP	-	Trace
WP-8	-	-	-	NP	NP	NP	-	NP
WP-9	0.01	-	-	NP	NP	NP	-	NP
WP-10	-	-	-	NP	0.20	Dry	-	NP
WP-11	0.01	-	-	NP	Dry	Dry	-	Thick
WP-12	-	-	-	NP	Dry	-	-	NP

Table 12 (Cont'd)  
 Free Phase Hydrocarbon Thickness in Monitoring Wells and Well Points  
 (feet)

Well ID	Sept. 93	Dec. 93	Mar. 94	Jul. 94	Sept. 94	Dec. 94	Mar. 95	Jun. 95
WP-13	-	-	-	NP	NP	NP	-	NP
WP-14	-	-	-	NP	Tar	-	-	0.14
WP-15	-	-	-	NP	NP	NP	-	NP
WP-16	-	-	-	NP	In Silt	In Silt	-	NP
WP-17	-	-	-	NP	Dry	Dry	-	NP
WP-18	-	-	-	NP	NP	NP	-	NP
WP-19	-	0.01	-	NP	NP	NP	-	NP
WP-20	-	-	-	NP	Product	NP	-	NP
WP-21	-	-	-	NP	NP	NP	-	NP
WP-22	-	-	-	NP	NP	NP	-	NP
WP-23	-	-	-	NP	NP	NP	-	NP
WP-24	-	-	-	NP	NP	NP	-	NP
WP-25	0.05	0.05	-	0.22	Product	0.20	-	1.56
WP-26S	-	0.12	-	2.20	2.59	1.53	-	NP
WP-26D	-	-	-	NP	NP	NP	-	NP
WP-27S	-	-	-	NP	NP	NP	-	Trace
WP-27D	-	-	-	0.11	0.45	0.49	-	Trace
WP-28	-	-	-	NP	NP	NP	-	NP
WP-29	-	-	-	NP	NP	NP	-	NP
WP-30	-	-	-	NP	NP	NP	-	NP
WP-31	-	-	-	NP	NP	NP	-	NP
WP-32	-	-	-	Dry	Dry	Dry	-	Dry
WP-33	-	-	-	NP	NP	NP	-	NP
WP-34	-	-	-	NP	NP	NP	-	NP
WP-35	-	-	-	NP	NP	NP	-	NP
WP-36	-	-	-	NP	NP	NP	-	NP
WP-37	-	-	-	NP	NP	NP	-	NP

Notes: NP = Not present.  
 - = Not measured.

Table 13  
 BTEX Quarterly Analytical Results  
 (µg/L)

Well ID	Mar. 94	July 94	Sept. 94	Dec. 94	Mar. 95	June 95
MW-1	ND	1.3	ND	ND	NS	NS
MW-2	70.2	ND	ND	ND	NS	NS
MW-3S	22.9	0.8	ND	ND	ND	ND
MW-3D	ND	0.6	ND	ND	ND	ND
MW-4	132.5/111.6	1862	2000	220	226	812
MW-5	7733	5130/4330	5760	4824	5150	NS
MW-6S	93.6	228	57.6	59	192	660/580
MW-6D	ND	ND	ND	ND	ND	ND/ND
MW-7	33.7	3.2	4.9	36	100	NS
MW-8	10320	2400	13000	5440	15100	NS
MW-9S	ND	0.6	ND	ND	0.6	ND
MW-11	129.8	ND	35.6	17.5	15	NS
MW-12	ND	1.9	ND	ND	NS	NS
MW-14	-	23000	2900	930	1125	10000
MW-15	-	60	351	290	NS	22.1
MW-16	-	2/11	ND	ND	ND	ND
MW-17	-	66	110/143.2	480	67	1583

Notes:

ND = Not detected < 0.5 µg/L.

NS = Not sampled for BTEX.

All units are in micrograms per liter (µg/L)

Table 14  
Results of Surface Water Sampling for BTEX from the Rio Grande

Well ID	Mar. 94	June 94	Sept. 94	Dec. 94	Mar. 95	June 95
US MW-12					ND	ND
DS MW-3D					ND	ND
DS MW-6D					ND	ND
DS MW-9D						ND

Table 15

## Results of Sediment Sampling from the Rio Grande

Location	Benzene	Toluene	Ethylbenzene	Xylenes
SS-1	ND	ND	ND	ND
SS-2	ND	ND	ND	ND
SS-3	ND	ND	ND	ND
SS-4	ND	ND	ND	1
SS-5	ND	ND	ND	ND
SS-6	ND	ND	ND	ND
SS-7	ND	ND	ND	ND
SS-8	ND	ND	ND	ND
SS-9	ND	ND	ND	ND
SS-10	ND	ND	ND	ND
SS-11	ND	ND	ND	ND
SS-12	ND	ND	ND	ND
SS-13	ND	ND	ND	ND
SS-14	ND	ND	ND	ND
SS-15	ND	ND	ND	ND
SS-16	ND	ND	ND	ND
SS-17	ND	ND	ND	ND
SS-18	ND	ND	ND	ND
SS-19	ND	ND	ND	ND
SS-20	ND	ND	ND	ND

Units are in  $\mu\text{g/L}$   
ND = Not Detected

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**Table 16**  
**Results of Metals Analyses Based on Quarterly Sampling of Monitoring Wells**

Well ID	Sample Date	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Zinc
NM WQCC Std.		5.0	0.1	1.0	0.01	0.05	0.05	1.0	1.0	0.05	0.2	0.002	1.00	0.2	0.05	0.1	10.0
MW-1	Dec-93	NA	0.07	0.14	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-1	Mar-94	NA	0.07	0.11	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-1	Jun-94	1.2	ND	0.18	ND	ND	ND	0.01	1.96	ND	1.42	ND	ND	ND	ND	ND	0.01
MW-1	Sep-94	0.11	ND	0.13	ND	ND	ND	ND	0.08	ND	1.12	ND	ND	ND	0.1	ND	ND
MW-1	Dec-94	0.10	ND	0.12	ND	ND	ND	0.02	0.03	ND	0.21	0.0002	ND	ND	ND	ND	ND
MW-2	Mar-94	NA	ND	0.01	ND	0.01	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-2	Jun-94	ND	ND	ND	ND	ND	ND	ND	1.83	ND	7.47	ND	ND	ND	ND	ND	ND
MW-2	Sep-94	0.12	0.05	0.03	ND	ND	ND	ND	0.05	ND	8.07	ND	ND	ND	ND	ND	0.03
MW-2	Dec-94	ND	ND	ND	ND	ND	ND	0.01	0.18	ND	1.95	ND	ND	ND	ND	ND	ND
MW-3D	Dec-93	NA	ND	0.04	ND	ND	ND	0.02	NA	ND	NA	ND	ND	0.04	0.1	ND	0.01
MW-3D	Mar-94	NA	ND	0.04	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-3D	Jun-94	0.23	ND	0.04	ND	ND	ND	ND	2.41	ND	3.25	ND	ND	ND	ND	ND	ND
MW-3D	Sep-94	0.1	ND	0.06	ND	ND	ND	ND	0.1	ND	2.75	ND	ND	ND	ND	0.01	0.02
MW-3D	Dec-94	0.09	ND	0.04	0.006	ND	ND	0.01	0.08	ND	1.27	ND	ND	ND	ND	ND	ND
MW-3S	Dec-93	NA	ND	0.08	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	0.1	ND	NA
MW-3S	Mar-94	NA	ND	0.08	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-3S	Jun-94	2.32	ND	0.13	ND	ND	ND	0.01	3.91	ND	1.12	ND	ND	ND	ND	ND	0.09
MW-3S	Sep-94	0.19	0.08	0.08	ND	ND	ND	ND	0.16	ND	0.51	ND	ND	ND	ND	ND	ND
MW-3S	Dec-94	0.13	ND	0.08	ND	ND	ND	0.01	0.12	ND	0.06	ND	ND	ND	ND	ND	ND
MW-4	Mar-94	NA	0.07	0.05	ND	0.01	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-4	Jun-94	ND	ND	0.2	ND	ND	ND	ND	1.78	ND	3.21	ND	ND	ND	ND	ND	ND
MW-4	Sep-94	0.11	0.11	0.39	ND	ND	ND	ND	0.86	ND	3.21	ND	ND	ND	ND	ND	0.01
MW-4	Dec-94	0.12	ND	0.17	ND	ND	ND	ND	1.99	ND	2.43	ND	ND	ND	ND	ND	ND
MW-5	Mar-94	NA	ND	0.31	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	0.1	ND	ND
MW-5	Jun-94	ND	ND	0.25	ND	ND	ND	ND	0.06	ND	0.01	ND	ND	ND	ND	ND	ND
MW-5	Sep-94	0.12	0.08	0.18	ND	ND	ND	ND	0.17	ND	0.03	ND	ND	ND	ND	ND	0.02
MW-5	Dec-94	0.06	0.13	0.22	ND	ND	ND	ND	0.09	ND	0.03	ND	ND	ND	ND	ND	ND

**Table 16 (Continued)**  
**Results of Metals Analyses Based on Quarterly Sampling of Monitoring Wells**

Well ID	Sample Date	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Zinc
NM WQCC Std.		5.0	0.1	1.0	0.01	0.05	0.05	1.0	1.0	0.05	0.2	0.002	1.00	0.2	0.05	0.1	10.0
MW-6D	Dec-93	NA	ND	0.05	0.029	ND	ND	0.02	NA	ND	NA	ND	ND	0.04	ND	ND	0.02
MW-6D	Mar-94	NA	ND	0.02	ND	ND	ND	ND	NA	ND	NA	ND	ND	0.04	ND	ND	ND
MW-6D	Jun-94	0.06	ND	0.03	ND	ND	ND	ND	1.30	ND	4.20	ND	ND	ND	ND	ND	ND
MW-6D	Sep-94	0.09	ND	0.05	ND	ND	ND	ND	0.28	ND	3.1	ND	ND	ND	ND	ND	0.02
MW-6D	Dec-94	0.07	ND	0.03	ND	ND	ND	0.01	0.11	ND	2.19	ND	ND	ND	ND	ND	ND
MW-6S	Dec-93	NA	ND	0.04	ND	ND	ND	0.02	NA	ND	NA	ND	ND	0.04	0.1	ND	0.01
MW-6S	Mar-94	NA	0.27	1.07	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-6S	Jun-94	0.08	0.08	1.16	ND	ND	ND	ND	4.78	ND	1.08	ND	ND	ND	ND	ND	ND
MW-6S	Sep-94	0.1	0.48	0.98	ND	ND	ND	ND	4.68	ND	0.59	0.0003	ND	ND	ND	0.01	0.02
MW-6S	Dec-94	0.08	0.08	0.73	ND	ND	ND	ND	1.88	ND	0.46	ND	ND	ND	ND	ND	0.01
MW-7	Mar-94	NA	0.08	0.22	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	0.01
MW-7	Jun-94	0.07	ND	0.35	ND	ND	ND	ND	1.92	ND	0.80	ND	ND	ND	ND	0.01	ND
MW-7	Sep-94	0.11	0.28	0.36	ND	ND	ND	ND	0.97	ND	0.87	0.0005	ND	ND	ND	ND	ND
MW-7	Dec-94	0.10	ND	0.41	ND	ND	ND	ND	0.45	ND	0.64	0.0006	ND	ND	ND	ND	ND
MW-8	Mar-94	NA	0.22	0.52	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	0.2	ND	0.01
MW-8	Jun-94	0.12	0.08	0.70	ND	ND	ND	0.01	5.79	ND	0.23	ND	ND	ND	ND	ND	0.02
MW-8	Sep-94	0.21	0.18	0.74	ND	ND	ND	0.01	5.1	ND	0.18	ND	ND	ND	ND	0.01	0.03
MW-8	Dec-94	0.19	0.14	0.68	ND	ND	ND	0.02	2.06	ND	0.18	ND	ND	ND	ND	ND	ND
MW-9S	Dec-93	NA	ND	0.07	0.014	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	0.01
MW-9S	Mar-94	NA	ND	0.04	ND	ND	ND	ND	NA	ND	NA	0.0002	ND	ND	ND	ND	ND
MW-9S	Jun-94	ND	ND	0.04	ND	ND	ND	ND	4.80	ND	3.20	ND	ND	ND	ND	ND	ND
MW-9S	Sep-94	0.12	ND	0.06	0.006	ND	ND	ND	4.66	ND	3.11	ND	ND	ND	ND	0.01	0.01
MW-9S	Dec-94	0.06	ND	0.04	0.005	ND	ND	ND	2.25	ND	2.30	ND	ND	ND	ND	ND	ND
MW-11	Mar-94	NA	0.1	1.0	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND
MW-11	Jun-94	0.10	0.07	1.10	0.009	ND	ND	0.01	4.68	ND	0.67	ND	ND	ND	ND	0.01	0.01
MW-11	Sep-94	0.12	0.15	1.03	0.009	ND	ND	ND	4.27	ND	0.75	0.0003	ND	ND	ND	ND	0.01
MW-11	Dec-94	0.09	0.05	0.84	ND	ND	ND	ND	1.58	ND	0.51	ND	ND	ND	ND	ND	ND

**Table 16 (Continued)**  
**Results of Metals Analyses Based on Quarterly Sampling of Monitoring Wells**

Well ID	Sample Date	Aluminum	Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Zinc
NM WQCC Std.		5.0	0.1	1.0	0.01	0.05	0.05	1.0	1.0	0.05	0.2	0.002	1.00	0.2	0.05	0.1	10.0
MW-12	Dec-93	NA	ND	0.04	0.005	ND	ND	ND	NA	ND	NA	ND	ND	0.05	ND	0.03	ND
MW-12	Mar-94	NA	0.08	0.03	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	0.2	ND	0.02
MW-12	Jun-94	ND	ND	0.02	ND	ND	ND	ND	3.89	ND	5.90	ND	ND	ND	ND	ND	0.01
MW-12	Sep-94	0.23	ND	0.11	0.009	0.05	ND	0.01	5.85	ND	10.8	ND	0.05	ND	0.4	0.03	0.04
MW-12	Dec-94	0.08	ND	0.03	ND	ND	ND	0.02	1.10	ND	6.18	ND	ND	ND	ND	ND	ND
MW-14	Jun-94	ND	0.05	0.67	ND	ND	ND	ND	4.78	ND	4.13	ND	ND	0.07	ND	ND	ND
MW-14	Sep-94	0.2	0.17	0.78	ND	ND	ND	ND	13.1	ND	7.59	0.0009	ND	ND	ND	0.02	0.02
MW-14	Dec-94	0.08	ND	0.22	ND	ND	ND	ND	10.3	ND	5.46	0.0024	ND	ND	ND	ND	ND
MW-15	Jun-94	0.32	ND	0.28	ND	ND	ND	ND	0.52	ND	1.06	ND	ND	ND	ND	ND	ND
MW-15	Sep-94	0.42	0.14	0.78	ND	ND	ND	ND	2.33	ND	2.9	ND	ND	ND	ND	0.02	0.01
MW-15	Dec-94	0.36	ND	0.38	ND	ND	ND	ND	3.69	ND	1.66	ND	ND	ND	ND	0.09	ND
MW-16	Jun-94	ND	ND	0.31	ND	ND	ND	ND	ND	ND	2.77	ND	ND	ND	ND	ND	ND
MW-16	Sep-94	0.12	0.05	0.09	ND	ND	ND	ND	2.05	ND	5.21	ND	ND	0.06	ND	ND	0.02
MW-16	Dec-94	0.11	ND	0.07	ND	ND	ND	ND	1.70	ND	4.15	ND	ND	0.05	ND	ND	ND
MW-17	Jun-94	0.05	ND	1.24	ND	ND	ND	ND	0.21	ND	3.16	ND	ND	0.05	ND	ND	ND
MW-17	Sep-94	0.22	0.16	2.11	ND	ND	0.03	ND	9.7	ND	8.48	ND	ND	ND	ND	0.02	0.02
MW-17	Dec-94	0.10	ND	0.42	ND	ND	ND	ND	8.47	ND	3.37	ND	ND	ND	ND	ND	ND

NMWQCC = New Mexico Water Quality Control Commission

Note: ND = Not Detected

NA = Not Analyzed

All units are in milligrams per liter (mg/L)

Table 17

## Analyses of Aquifer Slug Test Using Bouwer-Rice Method

PVC Casing radius, $r_c =$	0.167 ft
Wellbore radius, $r_w =$	0.5 ft
Saturated Aquifer Thickness, $b =$	80 ft
Screen Length, $L =$	10 ft
Gravel Pack Porosity, $n =$	0.27
Conductivity ratio, $K_z/K_r =$	1

Well Name	Lithologic Description	$H_o$ ft	H ft	$Y_o$ ft	K ft/min
MW-6D-F	70% sand, 15% gravel sand, 15% silty clay	0.86	32.60	1.48	0.07000
MW-6D-R	70% sand, 15% gravel sand, 15% silty clay	1.69	32.60	3.65	0.07000
MW-3D-F	60% sand, 20% silty sand, 20% gravel sand	0.98	33.43	1.43	0.04500
MW-9S-R	75% sand, 25% sandy gravel	1.66	11.39	2.10	0.04200
MW-9S-F	75% sand, 25% sandy gravel	1.68	11.39	1.90	0.04000
MW-10-R	90% sand, 10% sandy clay	2.22	12.48	1.79	0.00400
MW-3S-F	90% sand, 10% silty sand	1.64	12.59	1.55	0.00150
MW-6S-F	100% sand	1.78	11.89	1.40	0.00090
MW-6S-R	100% sand	1.80	11.89	1.67	0.00086
MW-1-F	50% silty clay, 50% silty sand	1.94	12.26	1.81	0.00069
MW-11-F	50% sand, 50% silty clay	1.77	14.94	1.23	0.00034
MW-5-F	60% sand, 40% silty clay	1.68	10.65	0.95	0.00010
MW-8-F	100% silty clay	2.08	11.25	0.78	0.00008

Notes: D - deep well,  
 S - shallow well,  
 F - falling-head test,  
 R - rising-head test,  
 $H_o$  - initial displacement,  
 H - static water column height in well,  
 $Y_o$  - intersection with y axis.  
 K - conductivity.

Table 18

Estimated Downstream Benzene Concentrations (Ct) in the Rio Grande

Parameter	Current Conditions			Future Conditions Realistic Case			Future Conditions Worst Case		
	Low Flow	Avg Flow	High Flow	Low Flow	Avg Flow	High Flow	Low Flow	Avg Flow	High Flow
Qa (cfs)	0.0011	0.0011	0.0011	0.0021	0.0021	0.0021	0.0011	0.0011	0.0011
K (ft/day)	14	14	14	14	14	14	14	14	14
i (ft/ft)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
A (ft <sup>2</sup> )	6,750	6,750	6,750	12,750	12,750	12,750	6,750	6,750	6,750
flow width	450	450	450	850	850	850	450	450	450
flow depth	15	15	15	15	15	15	15	15	15
Ca (ppb)	MW-6S = 220			Total Ca for the model cells = 31,780 (individual model cells Ca: 30 to 4,700)			MW-10 = 125,000 (Benzene concentration in free product)		
Qr (cfs) <sup>a</sup>	68	630	2,400	68	630	2,400	68	630	2,400
Ct (ppb)	0.0036	0.0004	0.0001	0.981	0.106	0.028	2.022	0.218	0.057

<sup>a</sup> Low, average, and high river flow rates were taken from recording years 1975 through 1995 at Courchesne Bridge gaging station (IBWC, 1996).

Table 19

## Comparison of Background Soil Samples with Culvert Soil Samples

Sample Location	Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc
Background													
BG-1 (GCL 1996)	NA	42	NA	9.2	11	NA	292	0.12	NA	ND	ND	NA	NA
BG-2 (GCL 1996)	NA	14	NA	1.8	8	NA	103	ND	NA	ND	ND	NA	NA
NMEID (Lab SLD)	NA	NA	NA	NA	9	NA	150	ND	NA	NA	ND	NA	NA
NMEID (Lab AT)	NA	71	NA	4.2	3	NA	182	0.05	NA	NA	1.2	NA	NA
NMEID (Lab IT)	NA	NA	NA	NA	4.3	NA	160	NA	NA	0.8	NA	NA	NA
MW-12	< 1.1	< 1.4	2.2	5.5	11	140	270	0.11	8	< 1.3	< 0.25	< 0.65	180
USGS Western US	< 1-2.6	< 0.1-97	< 1-13	NR	3-2000	2-300	< 10-700	< 0.01-4.6	< 5-700	NR	NR	2.4-31	< 20-1500
NURE													

## Culverts

Cul 4-1	< 1.1	< 1.4	0.9	4.2	23	90	75	0.04	10	< 1.3	0.9	< 0.65	120
Cul 3-1	< 1.1	< 1.4	0.7	0.9	7.5	6	6	< 0.02	5	< 1.3	< 0.25	< 0.65	21
Cul 3-2	< 1.1	< 1.4	1.6	2.3	12	13	8	< 0.02	9.5	< 1.3	< 0.25	< 0.65	30

## Standards

New Jersey*	340	20 (a)	1 (b)	100	NA	600 (d)	600 (f)	270	2400 (c)(e)	3100 (e)	4100 (e)	2 (b)	1500 (d)
US EPA**	30	80	0.2	40	400	NA	NA	20	2000	NA	200	NA	NA

All Units are mg/Kg

NA = Not Analyzed

ND = Not Detected

NR = Not Recorded

a) cleanup standard proposal was based on natural background.

b) health based criterion is lower than analytical limits; cleanup criterion based on practical quantitative level.

c) criterion based on inhalation exposure pathway which yielded a more stringent criterion than the incidental ingestion exposure pathway.

d) criterion based on ecological (phytotoxicity) effects.

e) level of the human health based criterion is such that evaluation for potential environmental impacts on a site by site basis is recommended.

f) criterion was derived from a model developed by the Society of Environmental Geochemistry and Health and was designed to be protective for adults in the workplace.

NMEID background data from NMEID Listing Site Inspection, January 16, 1990.

USGS Western US background data from Shaklette, H.T. et. al, 1971

\* "Cleanup Standards for Contaminated Sites," N.J.A.C. 7:26D, Department of Environmental Protection. Non-residential direct contact soil cleanup criteria.

1) Criteria are health-based using an incidental ingestion exposure pathway except where noted.

2) Criteria are subject to change based on site specific factors (e.g. aquifer characteristics, soil type, natural background, environmental impacts, etc.

\*\* Corrective Action for Solid Waste Management Units (SWMU) at Hazardous Waste Management Facilities. 40 CFR 264.521 (a)(2)(i-iv), action levels.

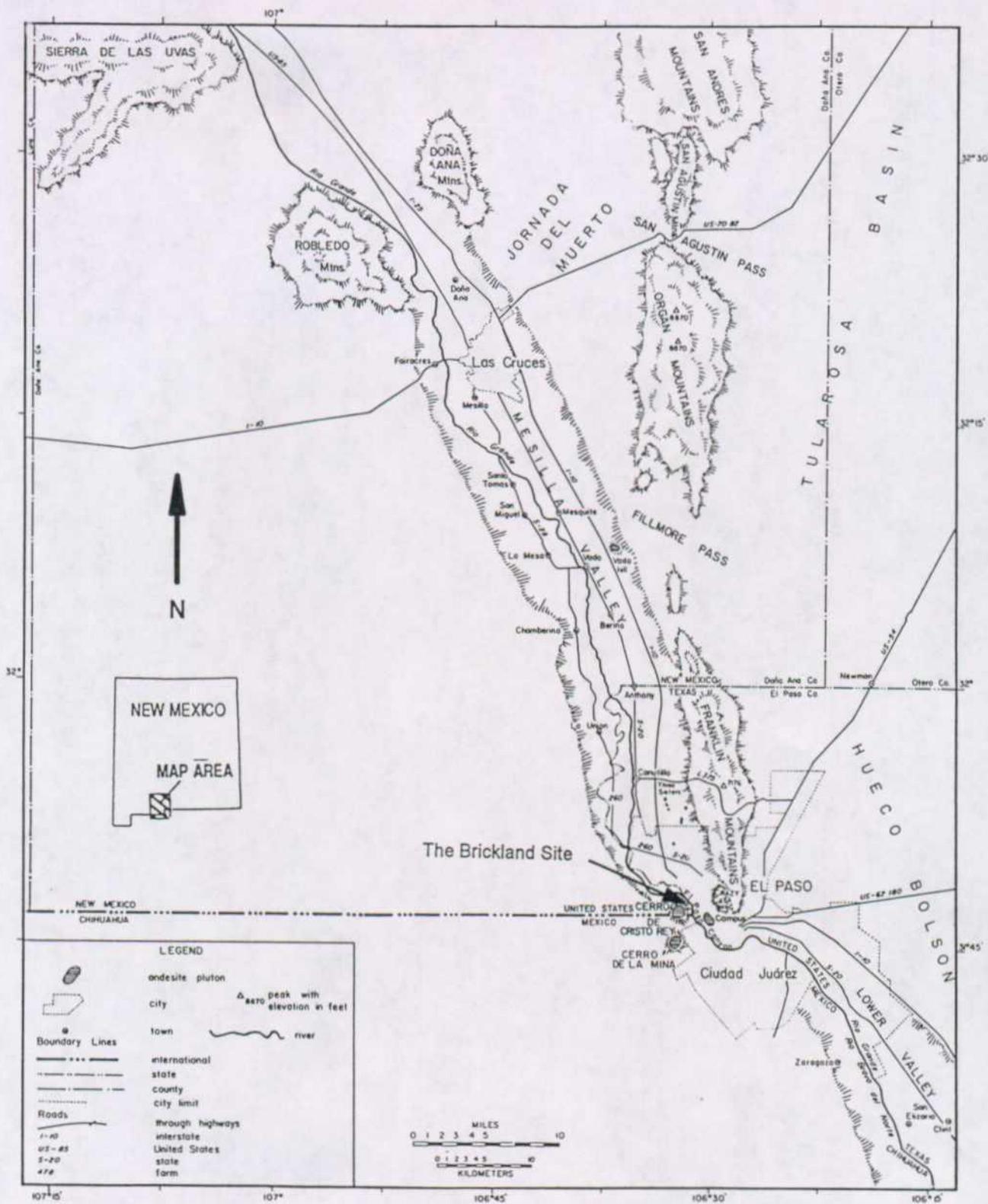
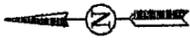


Figure 1 The Brickland Refinery Site Location Map



RIO GRANDE RIVER

TEXAS  
NEW MEXICO

COOLING WATER LAGOONS  
AND SLOP OIL LAGOONS

REFINERY PROCESS FACILITIES

DRUM AND TANK STORAGE AREA

REFINERY TRANSPORTATION CENTER

FORMER RESIDENCES

CISTERN

BULK PETROLEUM STORAGE

MISCELLANEOUS DIRT PILES

BULK PETROLEUM STORAGE

**LEGEND**

-  CONCRETE SLAB/PAD - BLDG FOUNDATION
-  WALL - MASONRY
-  TREE
-  FENCE
-  RIVER
-  STORM WATER OUTFALL WITH A DITCH

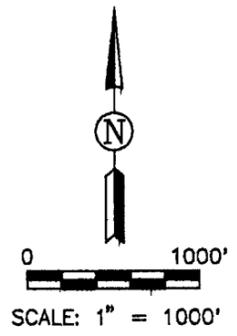
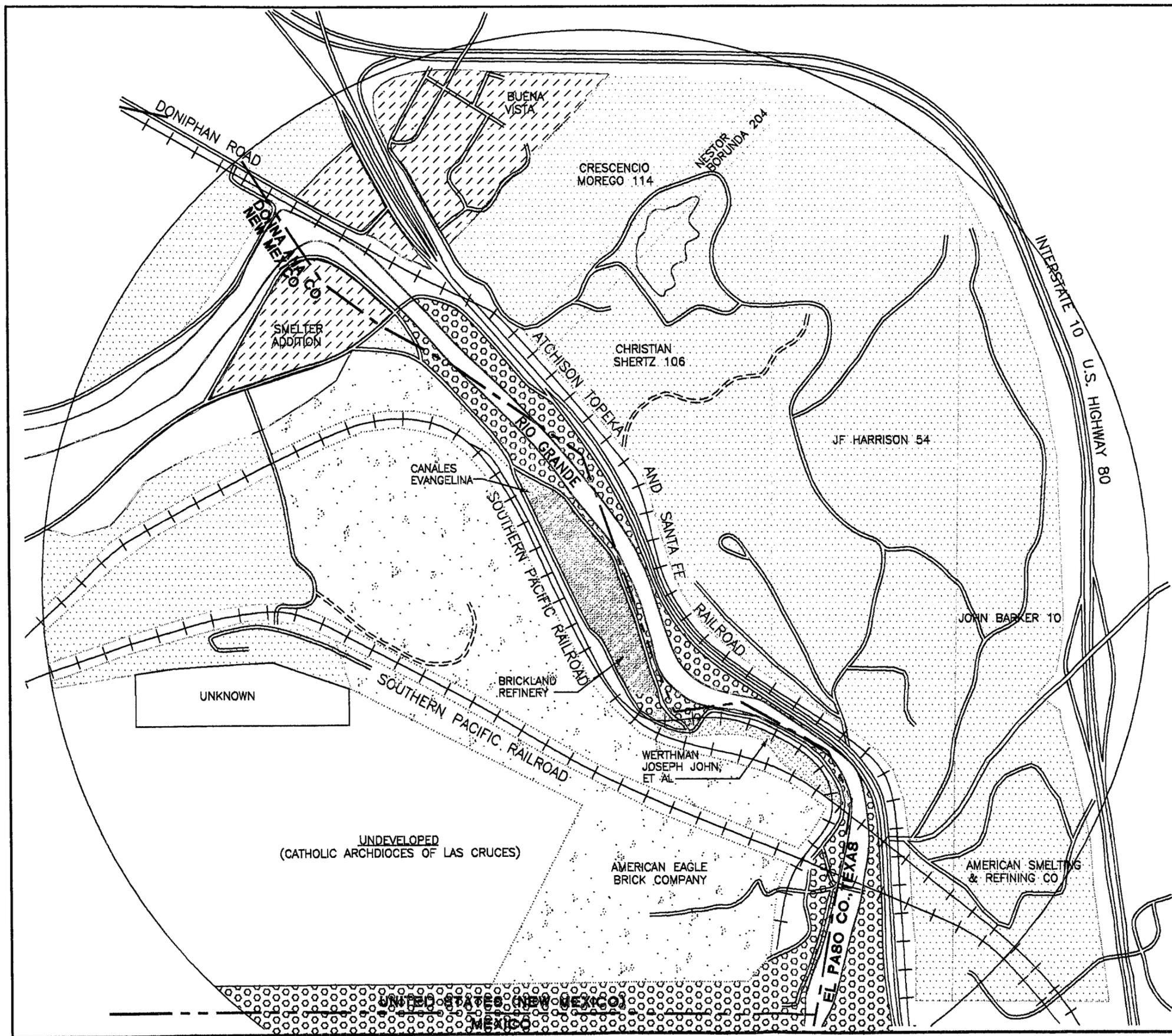
0 215'

SCALE: 1" = 215'



**FIGURE 2**  
SITE MAP SHOWING REFINERY  
OPERATION AREAS A THROUGH G

CLIENT: REDENE
DATE: 5/21/98
AUTHORED BY: RR
DRAWN BY: HQ
CHECKED BY: RSH
DWG. NO.: D:\REDENE\SITE-MP1.DWG



**LEGEND**

- RAILROAD
- [Stippled pattern] GENERAL SITE BOUNDARY
- [Diagonal lines] RESIDENTIAL
- [Dotted pattern] PRIVATE PARCELS
- [Cross-hatched pattern] INTERNATIONAL BOUNDARY AND WATER COMMISSION
- [Dotted pattern] COMMERCIAL/INDUSTRIAL
- [White box] RAILROAD OR HIGHWAY RIGHT OF WAY
- [Stippled pattern] MIXED RESIDENTIAL/COMMERCIAL
- [Cross-hatched pattern] AMERICAN EAGLE BRICK COMPANY

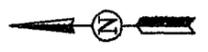
**SOURCE:**  
SMELTERTOWN QUADRANGLE  
7.5 MINUTE SERIES  
1955, PHOTOREVISED 1961 AND 1973

**NOTES:**  
ALL BOUNDARIES AND LOCATIONS ARE APPROXIMATE.  
FOR PROPERTY OWNERSHIP IN TEXAS, REFER TO APPENDIX



**FIGURE 3  
LAND OWNERSHIP IN THE VICINITY  
OF THE BRICKLAND REFINERY**

CLIENT: REXENE	
AUTHOR: RWH	DATE: 5-1-96
DRAWN BY: SAS5-1-96	REV. NO.: 0
CHECKED BY: MS	FILE: REX-1.DWG



RIO GRANDE RIVER

TEXAS  
NEW MEXICO

- LEGEND**
- CONCRETE SLAB/PAV - BLDG FOUNDATION
  - WALL - MASONRY
  - TREE
  - FENCE
  - INTERMITTENT STREAM
  - RIVER
  - MONITORING WELL
  - TEST PIT
  - TEST BORING
  - HAND AUGER BORING
  - SURFACE SAMPLING LOCATIONS
  - CISTERN SAMPLING LOCATION
  - RIVER SAMPLING LOCATION
  - STORM WATER OUTFALL WITH A DITCH
  - WELL POINT
  - TEST TRENCH
  - LOCATION IDENTIFIER
  - VP-17 GCL SAMPLING LOCATION
  - A-TP-68 EDER SAMPLING LOCATION

0 215'

SCALE: 1" = 215'

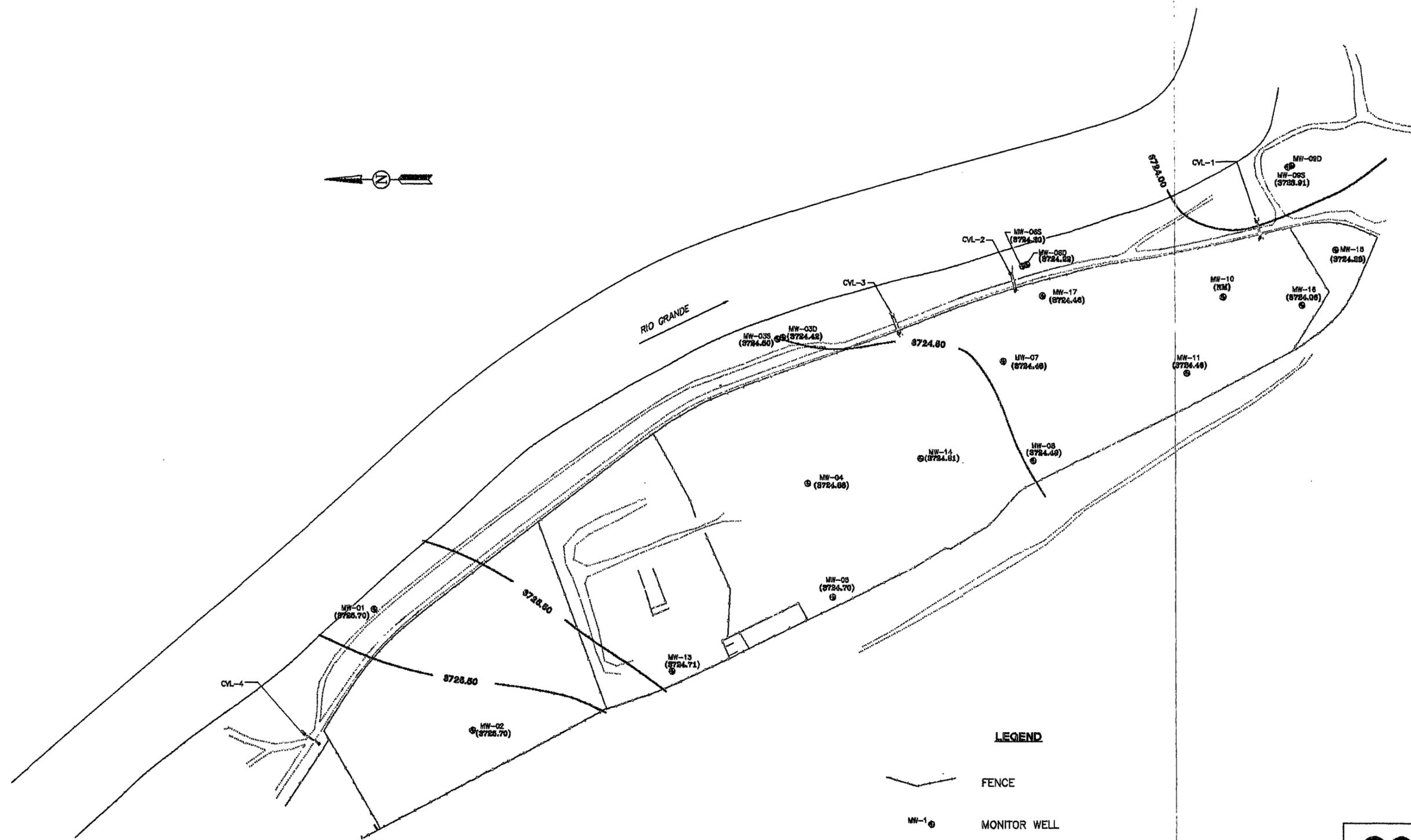
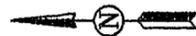
**GCL**

FIGURE 4  
SITE MAP SHOWING LOCATIONS OF  
TEST PITS, BORINGS, MONITOR WELLS,  
WELL POINTS.

CLIENT: REKNE
DATE: 8/23/86
AUTHOR: BR NR
DRAWN BY: RC
CHECKED BY: RWH
DWG. NO.: DA/REKNE/RKBASELDWG

RG-US-01

MW-12



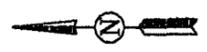
0 215'  
 SCALE: 1" = 215'

**LEGEND**

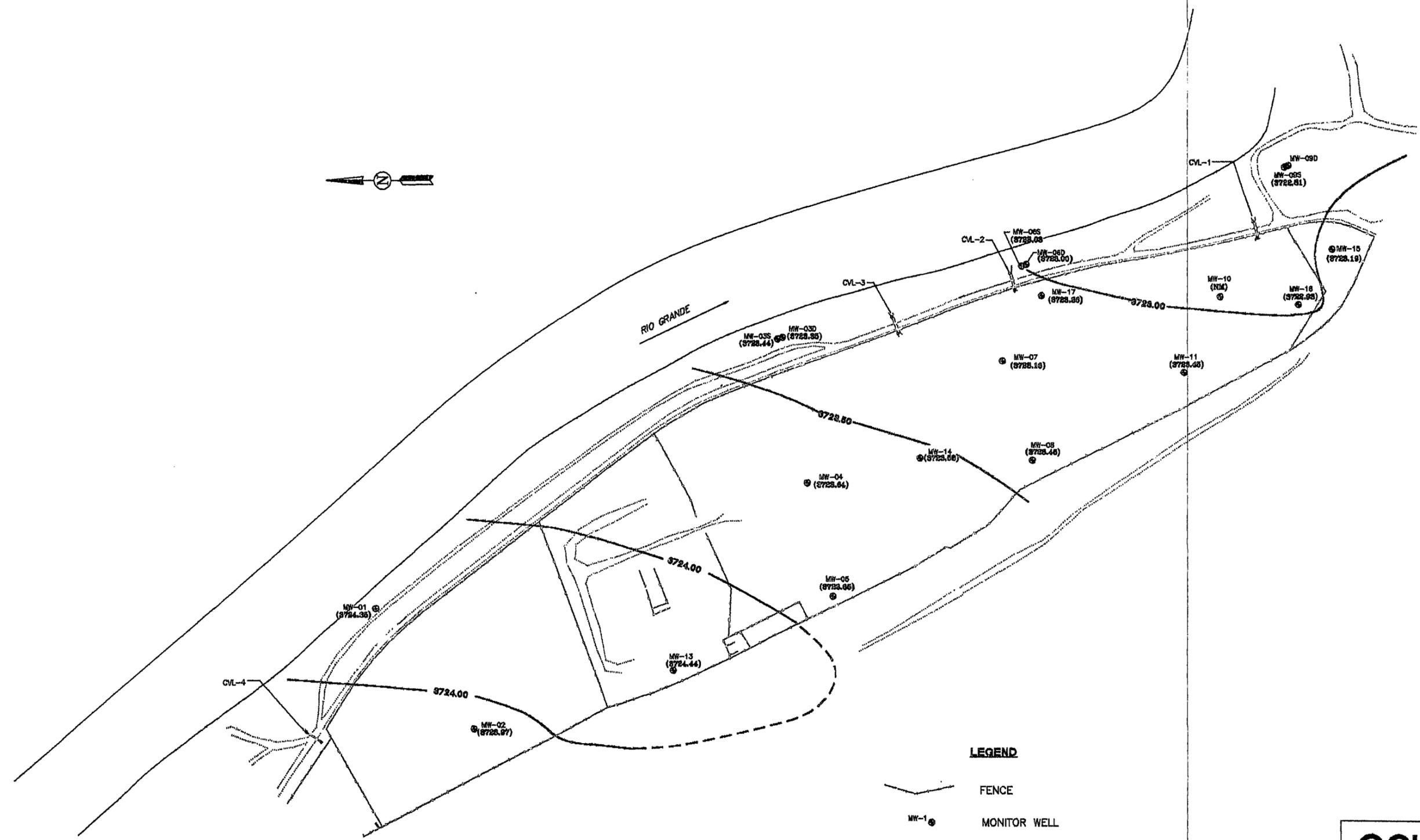
- FENCE
- MW-1  
 MONITOR WELL
- CVL-1  
 CULVERT
- (3724.81)  
 WATER LEVEL ELEVATION IN FEET AMSL
- WATER LEVEL CONTOUR IN FEET AMSL
- (NM)  
 NOT MEASURED

MW-12  
 (3725.70)

<b>GCL</b>	
<b>FIGURE 5</b> <b>GROUNDWATER ELEVATION</b> <b>CONTOUR MAP (SEPTEMBER 1994)</b> <b>BRICKLAND REFINERY SITE</b>	
CLIENT:	REXENE
DATE:	5/21/98
AUTHORED BY:	BR/RWH
DRAWN BY:	RG
CHECKED BY:	MWS
DWG. NO.:	REXENE\GWES94.DWG



RIO GRANDE



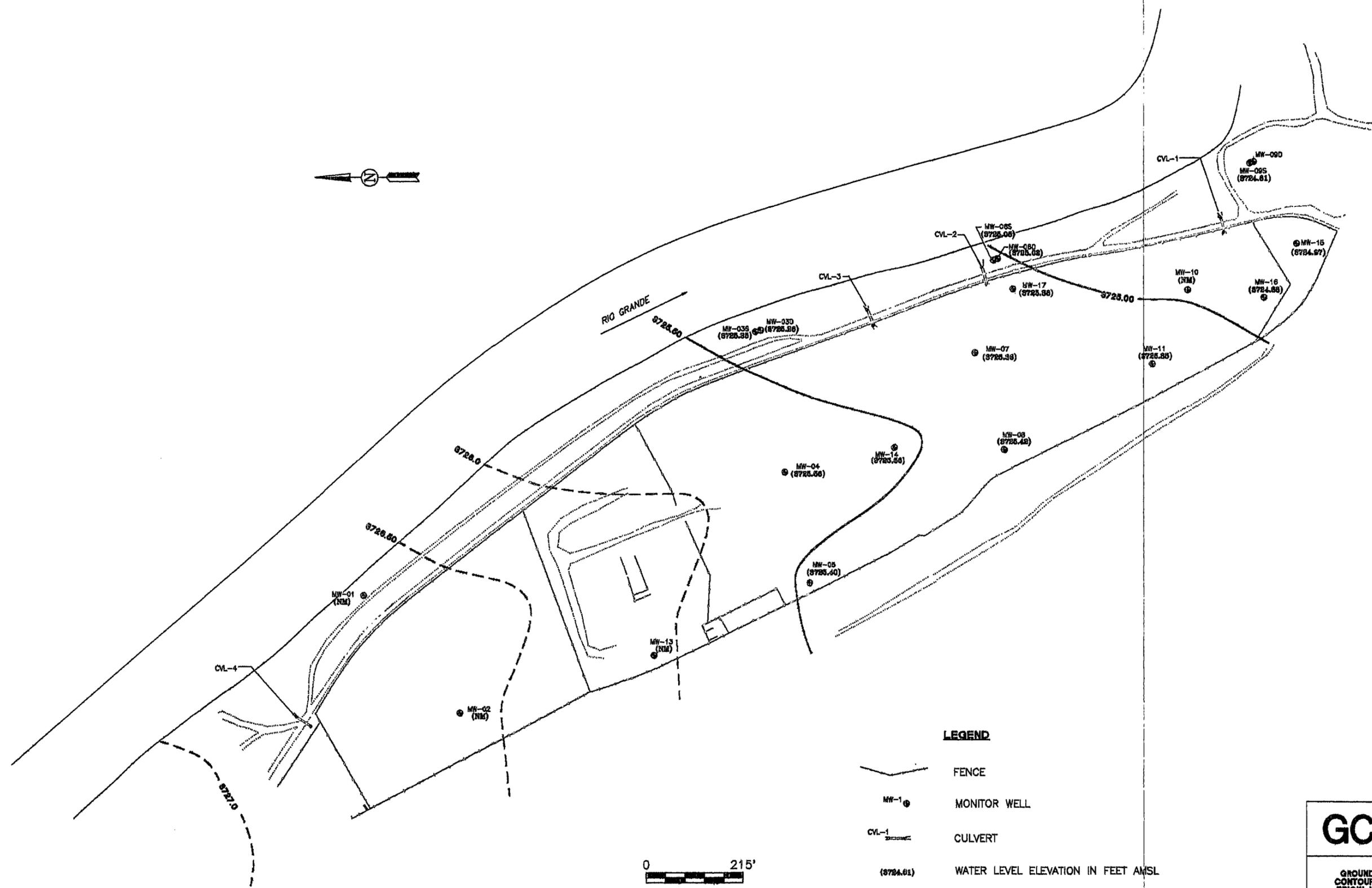
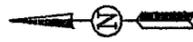
**LEGEND**

-  FENCE
-  MW-1 MONITOR WELL
-  CVL-1 CULVERT
-  (3724.81) WATER LEVEL ELEVATION IN FEET AMSL
-  WATER LEVEL CONTOUR IN FEET AMSL
-  (NM) NOT MEASURED

0 215'  
  
 SCALE: 1" = 215'

MW-12  
(3723.88)

<b>GCL</b>	
	<b>FIGURE 8 GROUNDWATER ELEVATION CONTOUR MAP (DECEMBER 1994) BRICKLAND REFINERY SITE</b>
CLIENT: REXENE	
DATE: 5/22/96	
AUTHORED BY: BR/RWH	
DRAWN BY: RG	
CHECKED BY: MWS	
DWG. NO.: \REXENE\GWED94.DWG	

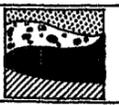


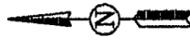
0 215'  
SCALE: 1" = 215'

**LEGEND**

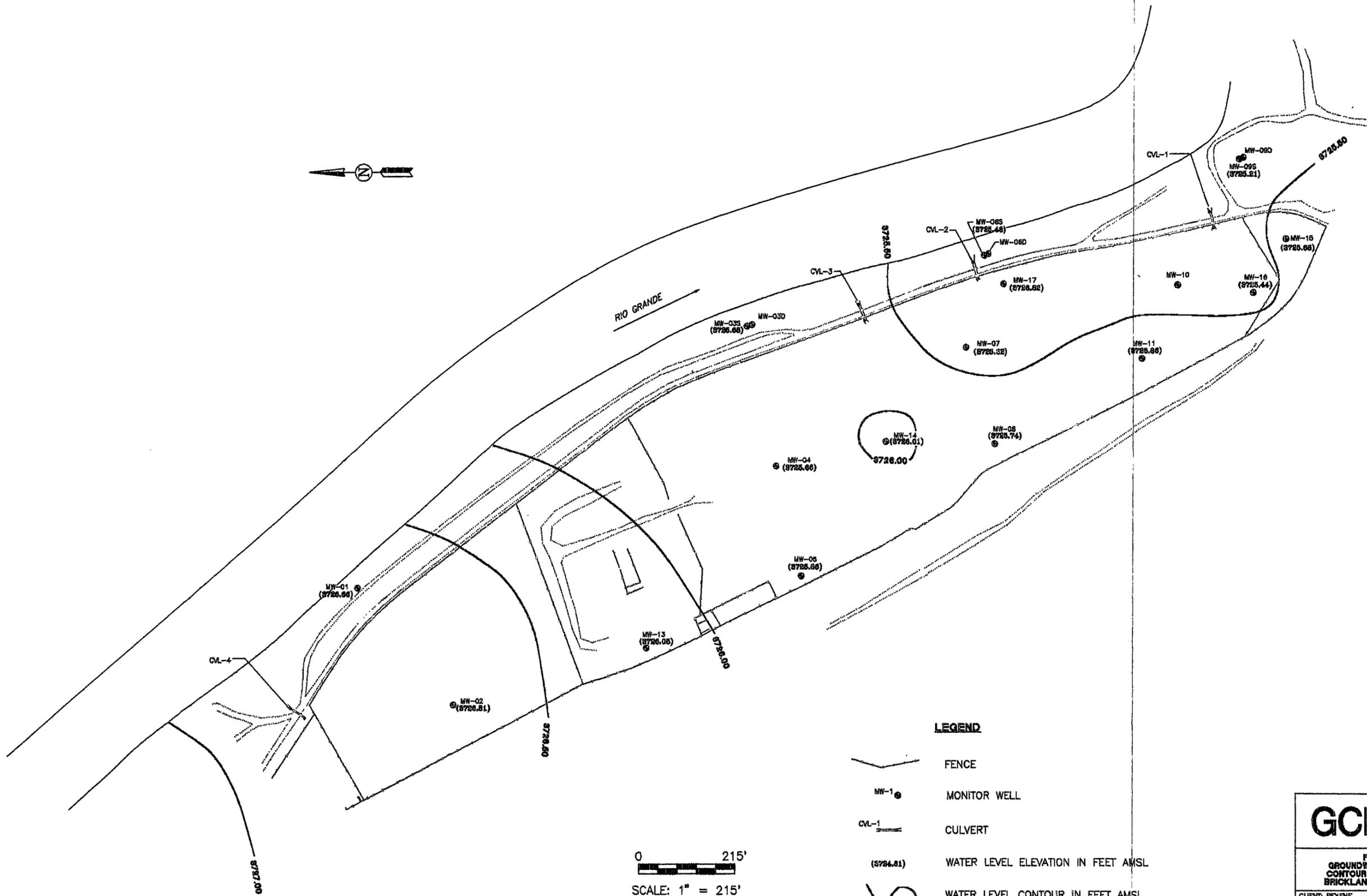
-  FENCE
-  MW-1 MONITOR WELL
-  CVL-1 CULVERT
-  (8724.81) WATER LEVEL ELEVATION IN FEET AMSL
-  WATER LEVEL CONTOUR IN FEET AMSL
-  (N/A) NOT MEASURED

MW-12 (N/A)

<b>GCL</b> 	
<b>FIGURE 7 GROUNDWATER ELEVATION CONTOUR MAP (MARCH 1996) BRICKLAND REFINERY SITE</b>	
CLIENT: REXENE	
DATE: 3/22/96	
AUTHORED BY: BR/RWH	
DRAWN BY: RG	
CHECKED BY: MWS	
DWG. NO.: D:\REXENE\GWEM95.DWG	



RIO GRANDE



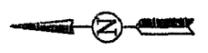
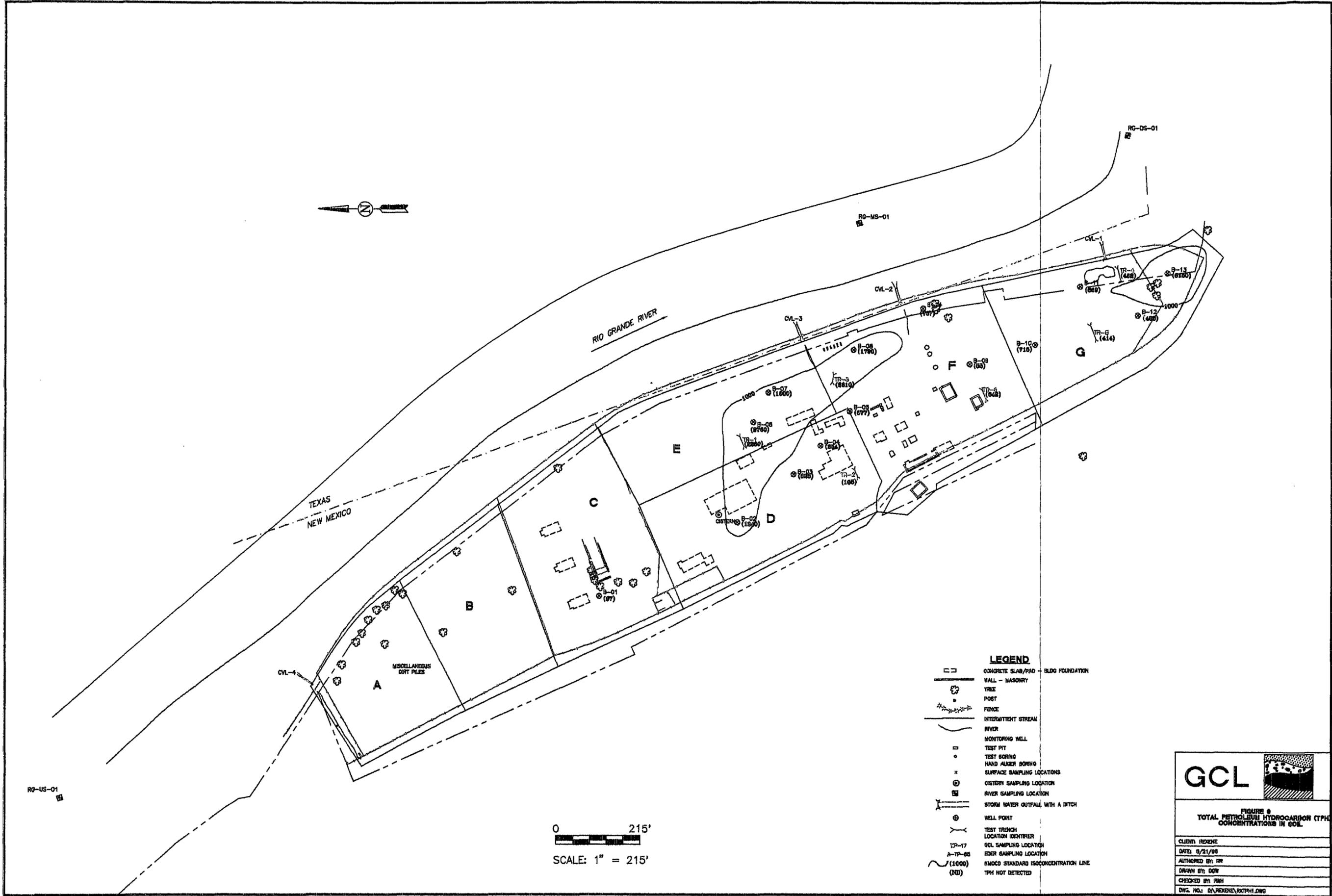
**LEGEND**

-  FENCE
-  MONITOR WELL
-  CULVERT
-  WATER LEVEL ELEVATION IN FEET AMSL
-  WATER LEVEL CONTOUR IN FEET AMSL
-  NOT MEASURED

0 215'  
SCALE: 1" = 215'

MW-12  
(8727.16)

<b>GCL</b> 	
<b>FIGURE 4 GROUNDWATER ELEVATION CONTOUR MAP (JUNE 1996) BRICKLAND REFINERY SITE</b>	
CLIENT: REXENE	
DATE: 6/22/96	
AUTHORED BY: BR/RWH	
DRAWN BY: RG	
CHECKED BY: MWS	
DWG. NO.: D:\REXENE\GWEJ96.DWG	



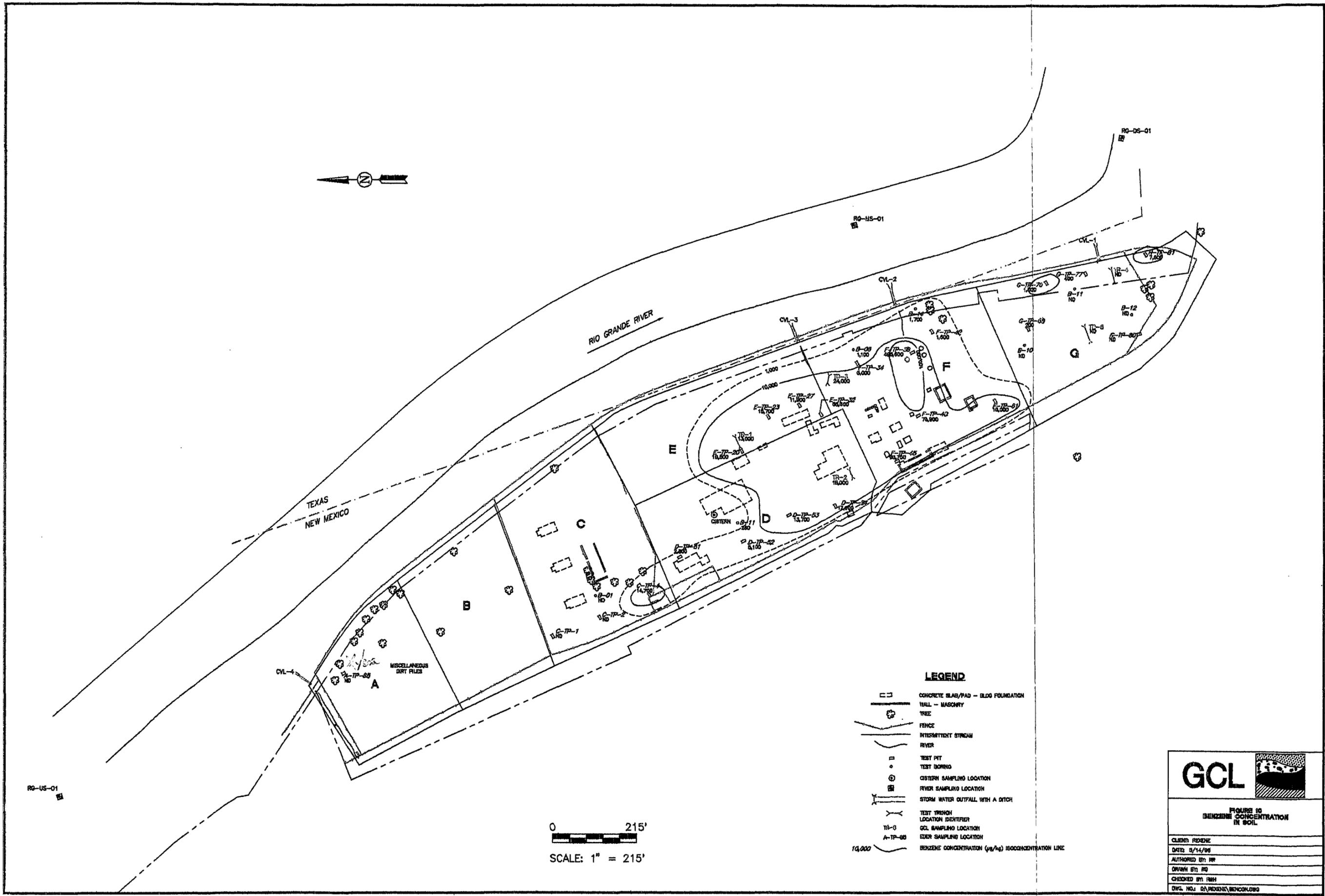
0 215'  
 SCALE: 1" = 215'

- LEGEND**
- CONCRETE SLAB/PAD BLDG FOUNDATION
  - MASONRY WALL
  - TREE
  - POST
  - FENCE
  - INTERMITTENT STREAM
  - RIVER
  - MONITORING WELL
  - TEST PIT
  - TEST BORING
  - HAND AUGER BORING
  - SURFACE SAMPLING LOCATIONS
  - CISTERN SAMPLING LOCATION
  - RIVER SAMPLING LOCATION
  - STORM WATER OUTFALL WITH A DITCH
  - WELL POINT
  - TEST TRENCH
  - LOCATION IDENTIFIER
  - GCL SAMPLING LOCATION
  - EIDER SAMPLING LOCATION
  - (1000) RMOC STANDARD ISOCONCENTRATION LINE
  - (ND) TPH NOT DETECTED

**GCL**

**FIGURE 6**  
 TOTAL PETROLEUM HYDROCARBON (TPH)  
 CONCENTRATIONS IN SOIL

CLIENT REFERENCE
DATE: 5/21/98
AUTHORED BY: RR
DRAWN BY: DOW
CHECKED BY: RRH
DWG. NO.: 04/REHENS/RKTPH.DWG

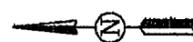


**LEGEND**

- CONCRETE SLAB/PAD - BLDG FOUNDATION
- WALL - MASONRY
- TREE
- FENCE
- INTERMITTENT STREAM
- RIVER
- TEST PIT
- TEST BORING
- CISTERN SAMPLING LOCATION
- RIVER SAMPLING LOCATION
- STORM WATER OUTFALL WITH A DITCH
- TEST TRENCH LOCATION IDENTIFIER
- GCL SAMPLING LOCATION
- EGR SAMPLING LOCATION
- BENZENE CONCENTRATION (µg/kg) ISOCENTRATION LINE

0 215'  
SCALE: 1" = 215'

<b>GCL</b>	
FIGURE 10 BENZENE CONCENTRATION IN SOIL	
CLIENT: REZONE	
DATE: 5/14/98	
AUTHOR: BY: RP	
DRAWN BY: RP	
CHECKED BY: RMH	
DWG. NO.: 04-REZONE-BENCON10	



RIO GRANDE

TR-03 2-4 FEET	
As	5 mg/Kg
Ba	136 mg/Kg
Cd	<0.5 mg/Kg
Cr	8 mg/Kg
Pb	7 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-03 4-8 FEET	
As	<6 mg/Kg
Ba	137 mg/Kg
Cd	<0.5 mg/Kg
Cr	7 mg/Kg
Pb	6 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-08 4-8 FEET	
As	0.11 mg/L
Ba	0.8 mg/L
Cd	0.12 mg/L
Cr	<0.01 mg/L
Pb	82 mg/L
Hg	<0.003 mg/L
Se	<0.01 mg/L
Ag	<0.01 mg/L

B-14 6-8 FEET	
As	<0.05 mg/L
Ba	3.0 mg/L
Cd	<0.01 mg/L
Cr	<0.01 mg/L
Pb	<0.07 mg/L
Hg	<0.003 mg/L
Se	<0.1 mg/L
Ag	<0.08 mg/L

B-11 8-10 FEET	
As	<0.05 mg/Kg
Ba	132-148 mg/Kg
Cd	<0.5 mg/Kg
Cr	7 mg/Kg
Pb	6 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-04 2-4 FEET	
As	<5 mg/Kg
Ba	83 mg/Kg
Cd	<0.5 mg/Kg
Cr	4 mg/Kg
Pb	8 mg/Kg
Hg	0.14 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-04 4-8 FEET	
As	13 mg/Kg
Ba	178 mg/Kg
Cd	0.8 mg/Kg
Cr	9 mg/Kg
Pb	14 mg/Kg
Hg	0.18 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-12 8-10	
As	<0.05 mg/L
Ba	0.8 mg/L
Cd	<0.01 mg/L
Cr	<0.01 mg/L
Pb	<0.05 mg/L
Hg	<0.003 mg/L
Se	<0.1 mg/L
Ag	0.02 mg/L

B-13 8-10 FEET	
As	5 mg/Kg
Ba	87 mg/Kg
Cd	<0.5 mg/Kg
Cr	8 mg/Kg
Pb	13 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-05 2-4 FEET	
As	<5 mg/Kg
Ba	69 mg/Kg
Cd	<0.5 mg/Kg
Cr	4 mg/Kg
Pb	6 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-05 4-8 FEET	
As	<5 mg/Kg
Ba	38 mg/Kg
Cd	<0.5 mg/Kg
Cr	4 mg/Kg
Pb	8 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-10 8-10 FEET	
As	<6 mg/Kg
Ba	138 mg/Kg
Cd	<0.5 mg/Kg
Cr	7 mg/Kg
Pb	<5 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-04 2-4 FEET	
As	21 mg/Kg
Ba	183 mg/Kg
Cd	1.1 mg/Kg
Cr	11 mg/Kg
Pb	46 mg/Kg
Hg	0.41 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-04 6-8 FEET	
As	<5 mg/Kg
Ba	204 mg/Kg
Cd	<0.5 mg/Kg
Cr	6 mg/Kg
Pb	9 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-02 2-4 FEET	
As	10 mg/Kg
Ba	127 mg/Kg
Cd	0.5 mg/Kg
Cr	10 mg/Kg
Pb	15 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-01 2-4 FEET	
As	<5 mg/Kg
Ba	89-100 mg/Kg
Cd	<0.5 mg/Kg
Cr	8.7 mg/Kg
Pb	8.10 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

TR-01 6-8 FEET	
As	22 mg/Kg
Ba	146 mg/Kg
Cd	0.8 mg/Kg
Cr	10 mg/Kg
Pb	9 mg/Kg
Hg	0.14 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-02 6-8 FEET	
As	<0.5 mg/Kg
Ba	2.1 mg/Kg
Cd	<0.01 mg/Kg
Cr	<0.01 mg/Kg
Pb	<0.05 mg/Kg
Hg	<0.003 mg/Kg
Se	<0.1 mg/Kg
Ag	<0.01 mg/Kg

B-02 6-8 FEET	
As	<0.05 mg/L
Ba	2.1 mg/L
Cd	<0.01 mg/L
Cr	<0.01 mg/L
Pb	<0.05 mg/L
Hg	<0.003 mg/L
Se	<0.1 mg/L
Ag	<0.01 mg/L

B-01 2-4 FEET	
As	18 mg/Kg
Ba	157 mg/Kg
Cd	<0.5 mg/Kg
Cr	10 mg/Kg
Pb	74 mg/Kg
Hg	0.14 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

B-01 4-8 FEET	
As	<8 mg/Kg
Ba	179 mg/Kg
Cd	<0.5 mg/Kg
Cr	9 mg/Kg
Pb	7 mg/Kg
Hg	<0.10 mg/Kg
Se	<10 mg/Kg
Ag	<1 mg/Kg

LEGEND

- \*\*\*\*\* FENCE
- ⊙ WELL POINT
- ⊙ MONITOR WELL
- ⊙ SOIL BORING
- > TEST TRENCH
- MW-01 LOCATION IDENTIFIER
- + VALUE EXCEEDS REGULATORY LIMIT

TCLP - Metals  
Maximum Concentration Limits  
(40 CFR 261)

- As 5.0 mg/L
- Ba 100 mg/L
- Cd 1.0 mg/L
- Pb 5.0 mg/L
- Hg 0.2 mg/L
- Se 1.0 mg/L
- Ag 5.0 mg/L

- As - Arsenic
- Ba - Barium
- Cd - Cadmium
- Cr - Chromium
- Pb - Lead
- Hg - Mercury
- Se - Selenium
- Ag - Silver

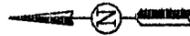
0 215'  
SCALE: 1" = 215'

⊙ MW-12

**GCL**

FIGURE 1a  
NONHA METALS and TCLP SOIL SAMPLE  
RESULTS FOR THE  
FORMER BRICKLAND REFINERY SITE  
(JUNE 1994 SAMPLING EVENT)

CLIENT: REDDIE  
DATE: 8/25/98  
AUTHOR: BR  
DRAWN BY: RG  
CHECKED BY: RW/LMS  
DWG. NO.: \REDDIE\SMPL9-04.DWG



TR-05	10-11 FEET
PYRENE	1800 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	1800 $\mu\text{g}/\text{Kg}$

B-14	6-8 FEET
1-METHYLNAPHTHALENE	2200 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	3800 $\mu\text{g}/\text{Kg}$
NAPHTHALENE	2100 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	8100 $\mu\text{g}/\text{Kg}$

TR-03	3 FEET
1-METHYLNAPHTHALENE	7700; 7100 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	11000; 10000 $\mu\text{g}/\text{Kg}$
NAPHTHALENE	5900; 4400 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	24,300; 21,500 $\mu\text{g}/\text{Kg}$

TR-01	2-4 FEET
1-METHYLNAPHTHALENE	1800 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	3000 $\mu\text{g}/\text{Kg}$
NAPHTHALENE	2400 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	7200 $\mu\text{g}/\text{Kg}$

TR-04	8 FEET
1-METHYLNAPHTHALENE	6300 $\mu\text{g}/\text{Kg}$
PYRENE	1700 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	7000 $\mu\text{g}/\text{Kg}$

B-11	8-10 FEET
1-METHYLNAPHTHALENE	79000 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	180000 $\mu\text{g}/\text{Kg}$
NAPHTHALENE	81000 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	290,000 $\mu\text{g}/\text{Kg}$

B-10	10-12 FEET
1-METHYLNAPHTHALENE	4700 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	3000 $\mu\text{g}/\text{Kg}$
PHENANTHRENE	2300 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	10,000 $\mu\text{g}/\text{Kg}$

B-05	4-6 FEET
1-METHYLNAPHTHALENE	3700; 8800 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	6000; 13000 $\mu\text{g}/\text{Kg}$
NAPHTHALENE	1800; 6300 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	11,500; 28,100 $\mu\text{g}/\text{Kg}$

TR-02	4-8 FEET
1-METHYLNAPHTHALENE	12000 $\mu\text{g}/\text{Kg}$
2-METHYLNAPHTHALENE	12000 $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	24,000 $\mu\text{g}/\text{Kg}$

B-01	4-6 FEET
PAH(s)	ND $\mu\text{g}/\text{Kg}$
TOTAL PAH(s)	ND $\mu\text{g}/\text{Kg}$

**ANALYTE LIST**

- Acenaphthene
- Acenaphthylene
- Anthracene
- Benzo(a)anthracene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(ghi)perylene
- Benzo(a)pyrene
- Chrysene
- Dibenzo(a,h)anthracene
- Fluoranthene
- Flourene
- Indeno(1,2,3-cd)pyrene
- 1-Methylnaphthalene
- 2-Methylnaphthalene
- Naphthalene
- Phenanthrene
- Pyrene

**LEGEND**

- \*\*\*\*\* FENCE
- ⊕ WELL POINT
- ⊙ MONITOR WELL
- ⊗ SOIL BORING
- Y TEST TRENCH
- MW-01 LOCATION IDENTIFIER

0 215'  
 SCALE: 1" = 215'



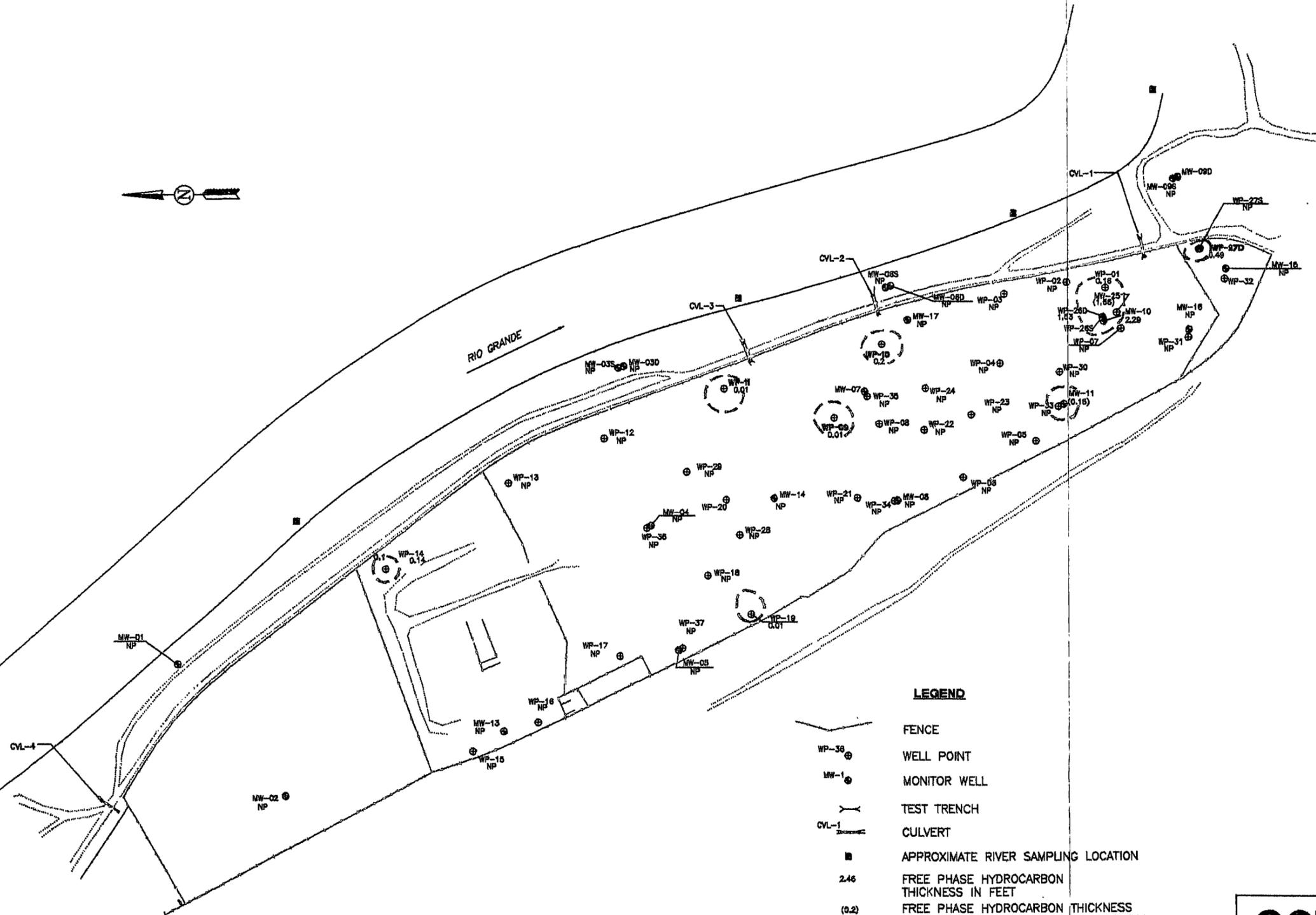
FIGURE 13  
 POLYAROMATIC HYDROCARBON (PAH) ANALYSIS  
 SOIL SAMPLES COLLECTED  
 FOR THE  
 FORMER UNCLE SAM'S BATTERY SITE  
 (CERCLA 9246 SAMPLING EVENT)

CLIENT: ROCKWELL
DATE: 5/23/98
AUTHORED BY: RR
DRAWN BY: RR
CHECKED BY: MHH/MSS
DWG. NO.: \ROCKWELL\EMPL-94-090

MW-12

MONITOR WELL/ WELL POINT	FREE PHASE HYDROCARBONS THICKNESS (FEET)	MEASUREMENT DATE
MW-01	NP	12-12-94
MW-02	NP	12-12-94
MW-03S	NP	03-27-95
MW-03D	NP	03-28-95
MW-04	NP	03-27-95
MW-05	NP	03-27-95
MW-06S	NP	03-28-95
MW-06D	NP	03-28-95
MW-07	NM	-
MW-08	NP	03-28-95
MW-09	NP	03-28-95
MW-09D	NM	-
MW-10	2.29	06-20-95
MW-11	0.16	06-20-95
MW-12	NM	-
MW-13	NP	12-12-94
MW-14	NP	03-27-95
MW-15	NP	03-27-95
MW-16	NP	03-27-95
MW-17	NP	03-27-95
WP-01	0.18	08-20-95
WP-02	NP	12-12-94
WP-03	NP	12-12-94
WP-04	NP	12-12-94
WP-05	NP	12-12-94
WP-06	NP	12-12-94
WP-07	NP	12-12-94
WP-08	NP	12-12-94
WP-09	0.01	10-06-93
WP-10	0.20	08-26-94
WP-11	0.01	10-06-93
WP-12	NP	07-11-94
WP-13	NP	12-12-94
WP-14	0.14	08-20-95
WP-15	NP	12-12-94
WP-16	NP	07-11-94
WP-17	NP	07-11-94
WP-18	NP	12-12-94
WP-19	0.01	12-03-93
WP-20	NP	08-26-94
WP-21	NP	12-12-94
WP-22	NP	12-12-94
WP-23	NP	12-12-94
WP-24	NP	12-12-94
WP-25	1.56	08-20-95
WP-26D	1.63	12-12-94
WP-27S	NP	12-12-94
WP-27D	0.49	12-12-94
WP-28	NP	12-12-94
WP-29	NP	12-12-94
WP-30	NP	12-12-94
WP-31	NP	12-12-94
WP-32	NM	-
WP-33	NP	12-12-94
WP-34	NP	12-12-94
WP-35	NP	12-12-94
WP-36	NP	12-12-94
WP-37	NP	12-12-94

NP = NO FREE PHASE HYDROCARBONS DETECTED  
 NM = NOT MEASURED



**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- TEST TRENCH
- CULVERT
- APPROXIMATE RIVER SAMPLING LOCATION
- 2.46 FREE PHASE HYDROCARBON THICKNESS IN FEET
- (0.2) FREE PHASE HYDROCARBON THICKNESS IN PARENTHESIS FOR WELLS WITH DEEPER SCREENED INTERVAL
- ZERO CONTOUR

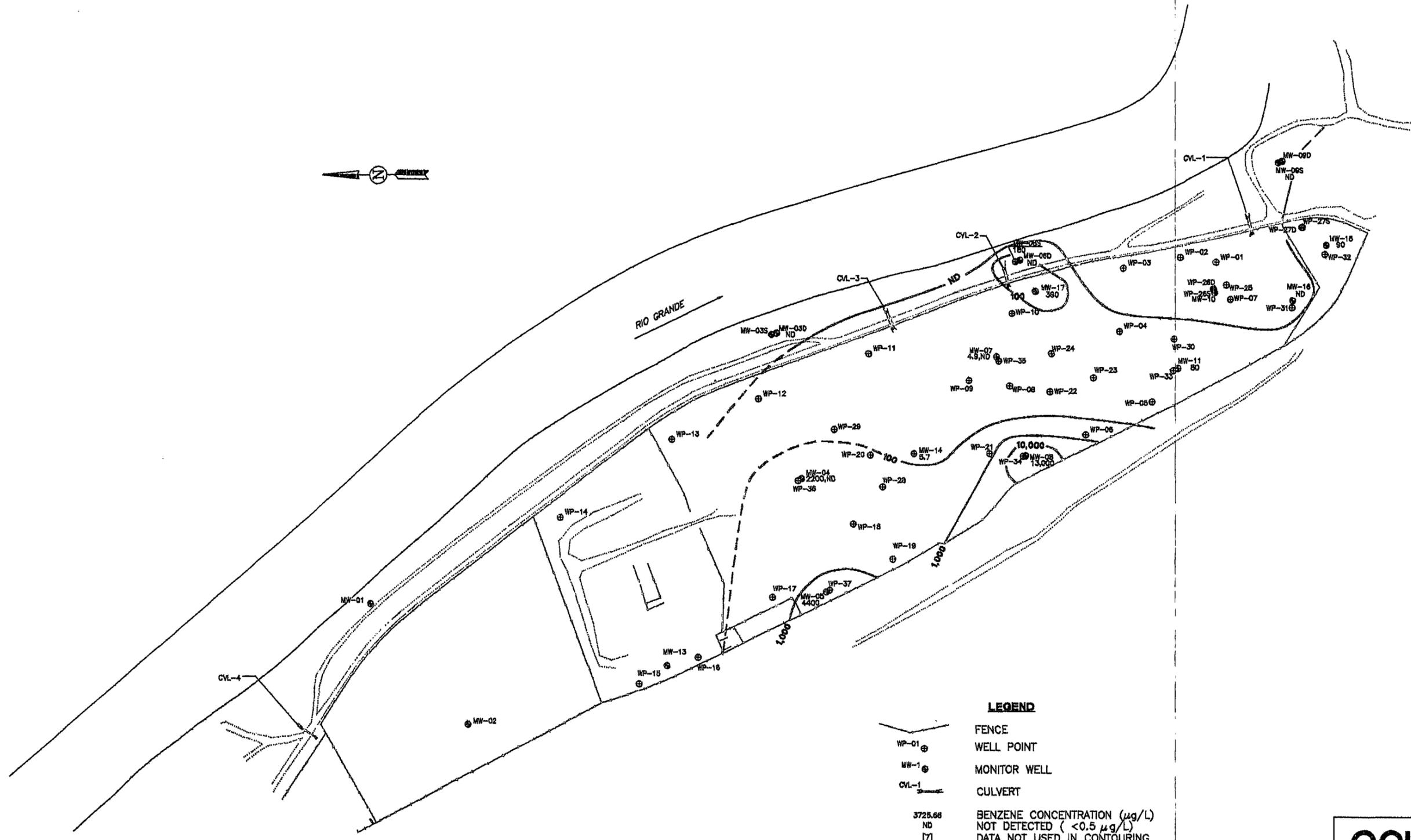
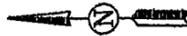
NOTE: DATA COLLECTED DURING QUARTERLY GROUNDWATER SAMPLING EVENTS (1993-1995).

**GCL**

FIGURE 19  
 FREE PHASE HYDROCARBON  
 THICKNESS MAP  
 BRICKLAND REFINERY SITE

CLIENT: REXENE  
 DATE: 9/13/95  
 AUTHORED BY:  
 DRAWN BY: NP  
 CHECKED BY: TS/BAL  
 DWG. NO.: \REXENE\FPROCT2.DWG

● MW-12



0 215'  
 SCALE: 1" = 215'

**LEGEND**

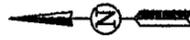
- FENCE
- WELL POINT
- MONITOR WELL
- CULVERT
- 3725.66 BENZENE CONCENTRATION (µg/L)
- ND NOT DETECTED (<0.5 µg/L)
- [7] DATA NOT USED IN CONTOURING
- (ND) CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- BENZENE ISOCONCENTRATION LINE (DASHED WHERE INFERRED)
- ND NOT DETECTED
- NS NOT SAMPLED

**GCL**

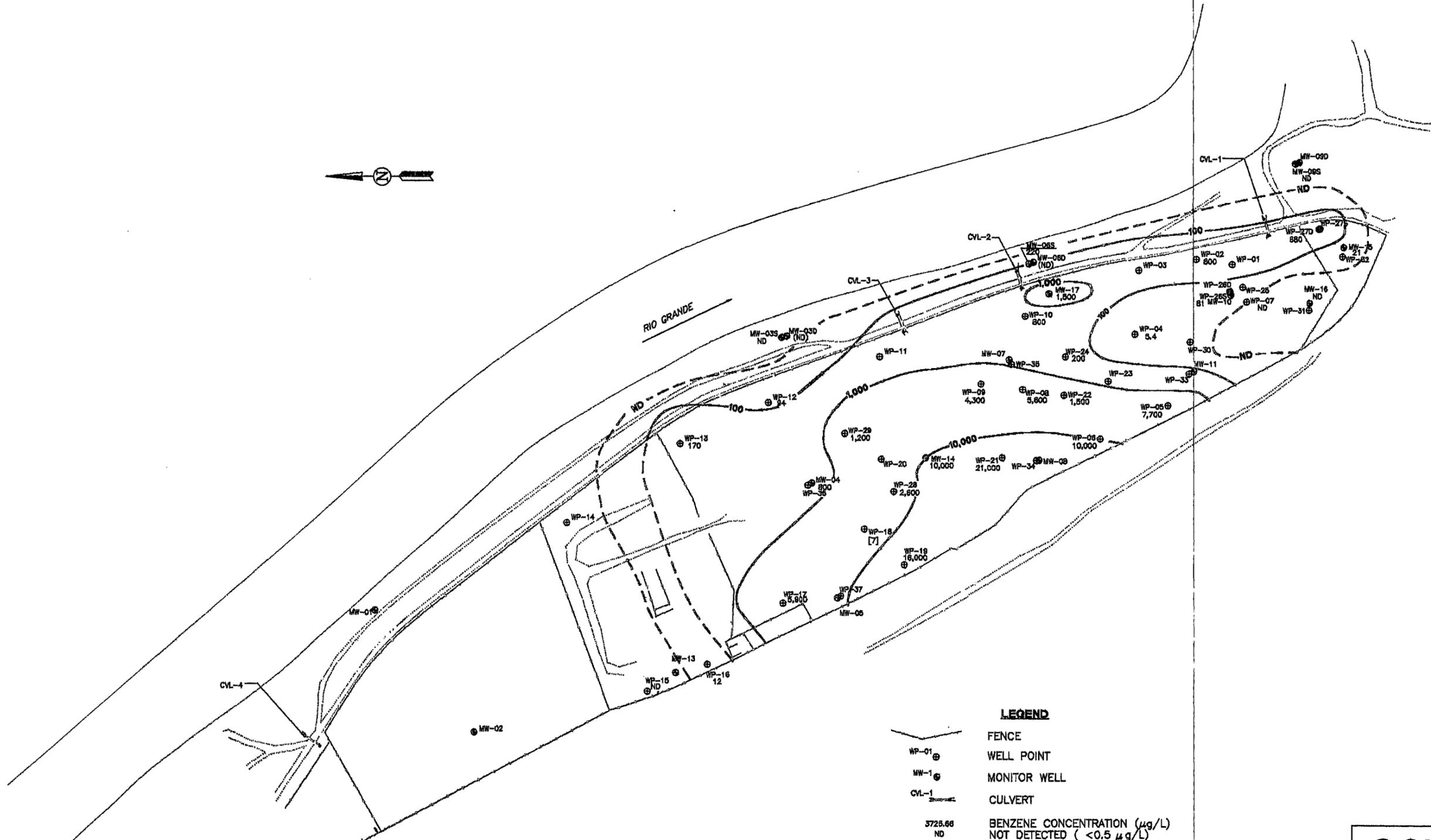
**FIGURE 14a**  
 BENZENE CONCENTRATION CONTOUR  
 MAP IN 6TH QUARTER (SEPT. 1996)  
 BRICKLAND REFINERY SITE

CLIENT: REXENE
DATE: 6/22/96
AUTHORED BY: BR/RWH
DRAWN BY: RG
CHECKED BY: MWS
DWG. NO.: \REXENE\BENS06.DWG

MW-12



RIO GRANDE



0 215'  
SCALE: 1" = 215'

**LEGEND**

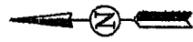
- FENCE
- WELL POINT
- MONITOR WELL
- CULVERT
- 3725.66 BENZENE CONCENTRATION (µg/L)
- ND NOT DETECTED (<0.5 µg/L)
- [7] DATA NOT USED IN CONTOURING
- (ND) CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- BENZENE ISOCONCENTRATION (DASHED WHERE INFERRED)
- ND NOT DETECTED
- NS NOT SAMPLED

⊙ MW-12  
ND

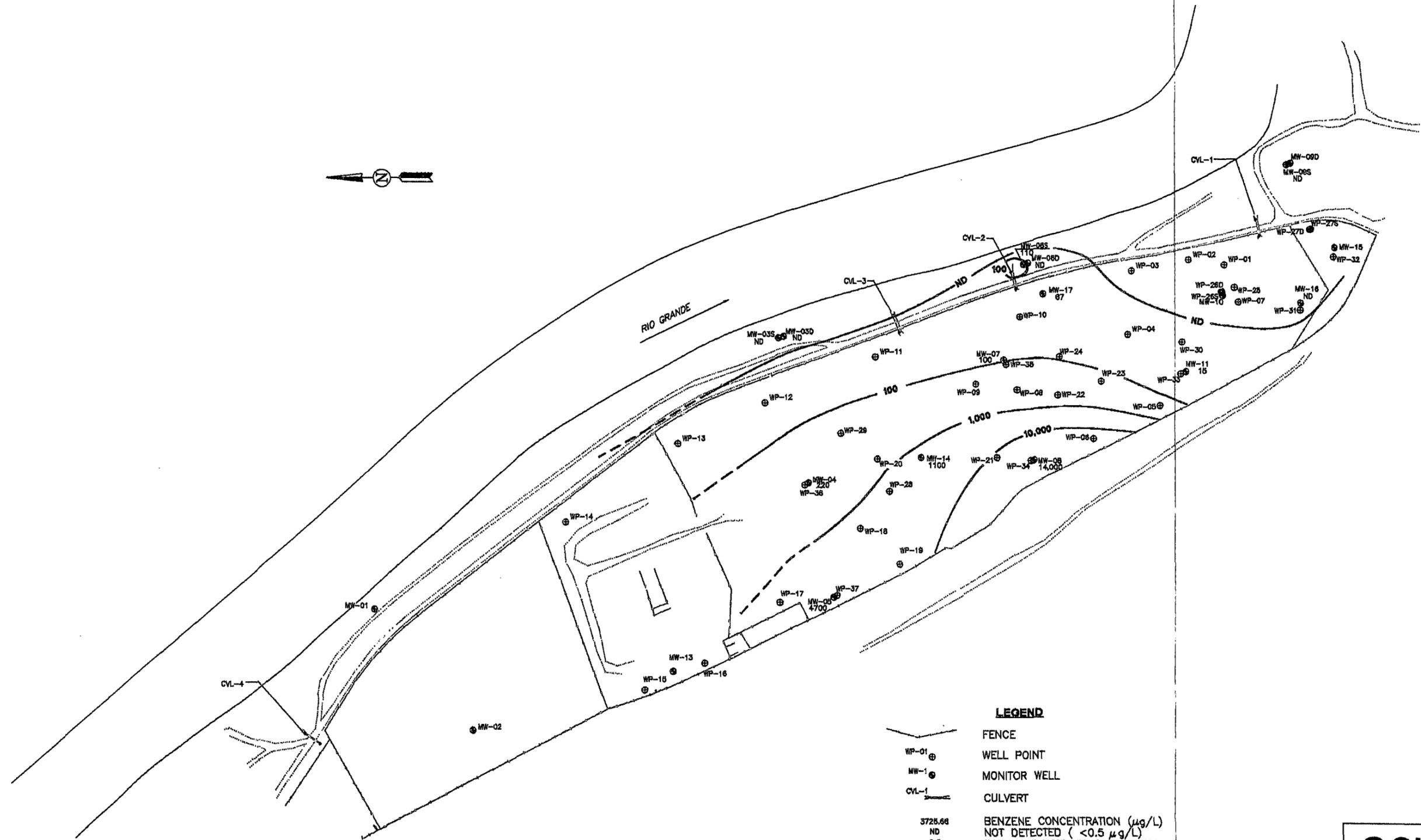


FIGURE 14b  
BENZENE CONCENTRATION CONTOUR  
MAP IN 8TH QUARTER (JUNE 1996)  
BRICKLAND REFINERY SITE

CLIENT: REKENE
DATE: 9/21/96
AUTHORED BY: BR/RWH
DRAWN BY: RG
CHECKED BY: MYS
DWG. NO.: \REKENE\BENJ96.DWG



RIO GRANDE



**LEGEND**

- FENCE
- WP-01  
WELL POINT
- MW-1  
MONITOR WELL
- CVL-1  
CULVERT
- 3725.66  
BENZENE CONCENTRATION (µg/L)
- ND  
NOT DETECTED (<0.5 µg/L)
- D7  
DATA NOT USED IN CONTOURING
- (ND)  
CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- BENZENE ISOCONCENTRATION LINE (DASHED WHERE INFERRED)
- ND  
NOT DETECTED
- NS  
NOT SAMPLED

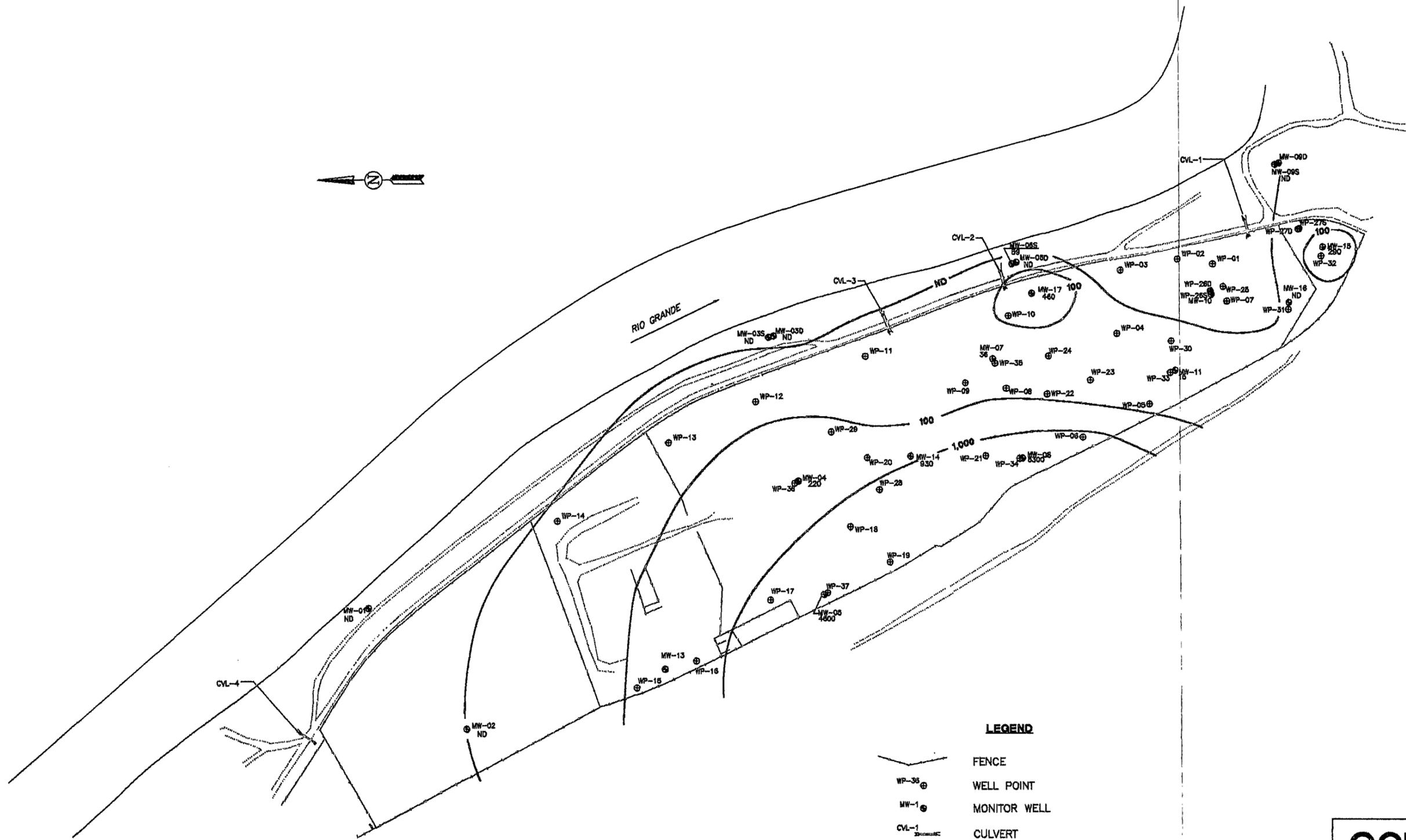
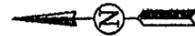
0 215'  
SCALE: 1" = 215'

MW-12  
15 @ 10

**GCL**

FIGURE 14e  
BENZENE CONCENTRATION CONTOUR  
MAP IN 8TH QUARTER (MARCH 1995)  
BRICKLAND REFINERY SITE

CLIENT: REXENE
DATE: 6/22/96
AUTHORED BY: BR/RWH
DRAWN BY: RG
CHECKED BY: MWS
DWG. NO.: \REXENE\BENM95.DWG



**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- CULVERT
- 3725.00 BENZENE CONCENTRATION ( $\mu\text{g/L}$ )
- (ND) CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- BENZENE CONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- ND NOT DETECTED ( $< 0.5 \mu\text{g/L}$ )
- NS NOT SAMPLED

0 215'  
SCALE: 1" = 215'



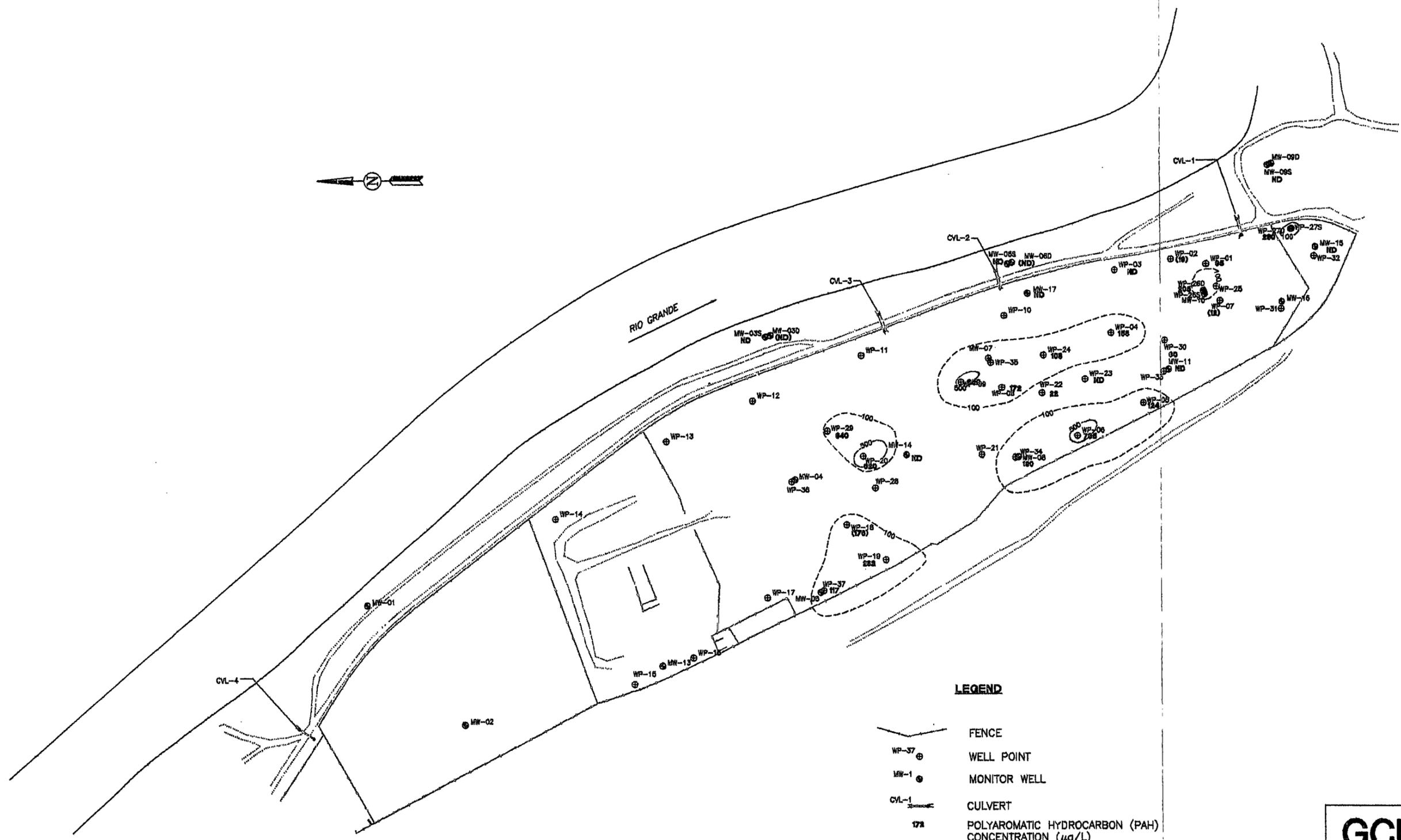
**FIGURE 14d**  
BENZENE CONCENTRATION CONTOUR  
MAP IN 6TH QUARTER (DECEMBER 94)  
BRICKLAND REFINERY SITE

CLIENT: REXENE
DATE: 6/21/96
AUTHORED BY: BR/RWH
DRAWN BY: RG
CHECKED BY: MWS
DWG. NO.: \REXENE\BEND94.DWG

MW-12  
ND



RIO GRANDE



**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- CULVERT
- POLYAROMATIC HYDROCARBON (PAH) CONCENTRATION ( $\mu\text{g/L}$ )
- NOT DETECTED ( $< 10 \mu\text{g/L}$ )
- CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- PAH CONCENTRATION CONTOUR (DASHED WHERE INFERRED)

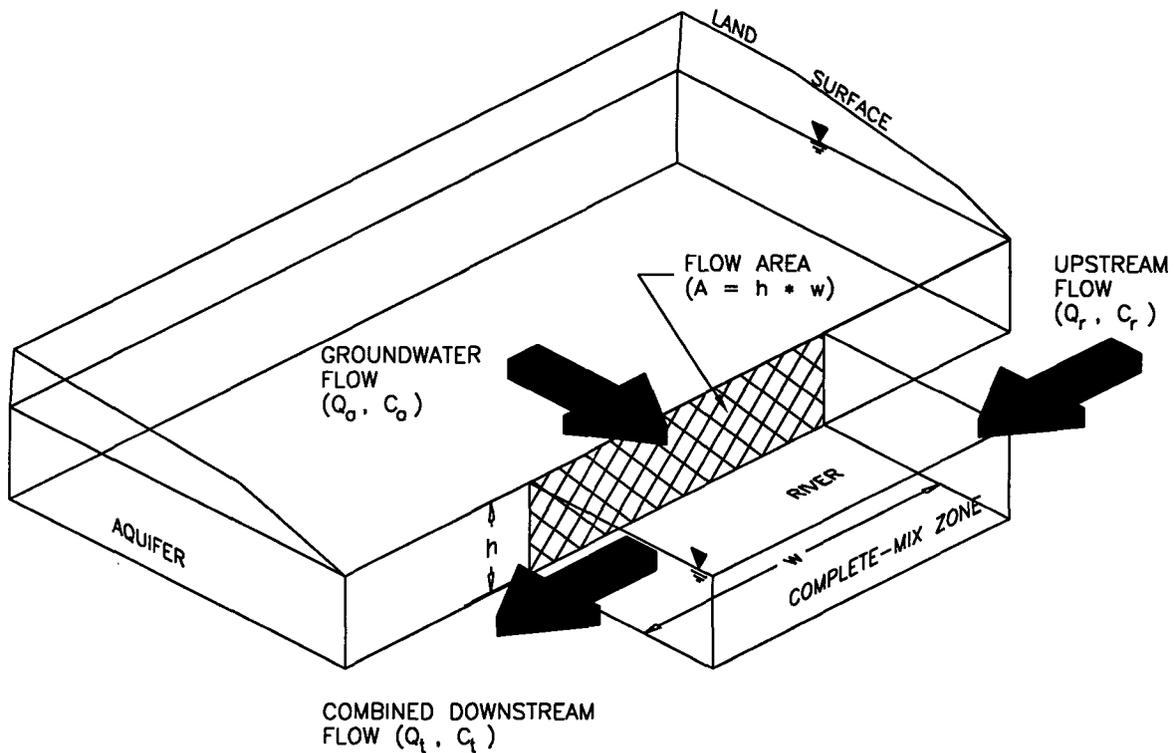
0 215'  
SCALE: 1" = 215'

MW-12

**GCL**

**FIGURE 16**  
POLYAROMATIC HYDROCARBON (PAH)  
CONCENTRATION CONTOUR MAP  
IN GROUNDWATER  
5TH QUARTER (MARCH 1998)  
BRICKLAND REFINERY SITE

CLIENT: REXENE
DATE: 9/13/85
AUTHORED BY: RR
DRAWN BY: MP
CHECKED BY: TS/BAL
DWG. NO.: \REXENE\1STQTR85.DWG



MIXING ZONE MODEL EQUATION  $C_t Q_t = C_r Q_r + C_o Q_o$

WHERE  $C_t$  = DOWNSTREAM CONCENTRATION IN RIVER  
 $Q_t$  = DOWNSTREAM RIVER FLOW RATE  
 $C_r$  = UPSTREAM CONCENTRATION IN RIVER  
 $Q_r$  = UPSTREAM RIVER FLOW RATE  
 $C_o$  = CONCENTRATION IN GROUNDWATER  
 $Q_o$  = GROUNDWATER FLOW RATE

TO FIND DOWNSTREAM CONCENTRATION, ( $C_t$ ) ASSUME  $C_r = 0$ ,  $Q_t = Q_r + Q_o$ , AND THEN SOLVE FOR  $C_t$ .

$$C_t = \frac{C_o Q_o}{Q_r + Q_o} \quad \text{NO. 1}$$

TO FIND THE GROUNDWATER FLOW RATE  
 USE THE FOLLOWING EQUATION

$$Q = K i A \quad \text{NO. 2}$$

WHERE  $Q$  = GROUNDWATER FLOW RATE  
 $K$  = AQUIFER HYDRAULIC CONDUCTIVITY  
 $i$  = HYDRAULIC GRADIENT  
 $A$  = AREA OF FLOW PERPENDICULAR TO FLOW DIRECTION

NOTE : RIVER FLOW RATES TAKEN FROM UPSTREAM GAGING STATION

**GCL**



CLIENT: REXENE

DATE: 9/13/95

AUTHOR: BAL

CK'D BY: BAL

REV. NO.: 0

DRAWN BY: MP

FILE: MXNGZN

**FIGURE 16  
 MIXING ZONE MODEL**

**Appendix A**

Property Owners in Vicinity of the Site

Included are survey abstracts for the Texas properties.  
Detailed information for the New Mexico properties to follow.

EL PASO (CAD), TX.

K02

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE				D -S -F CDS IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA				BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X134-999-0000-6100 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 JOHN WHITAKER SURV 134 ABST 2715 LAND AREA- 79.518AC  
 TR 3-D (79.5188 ACRES) CARRIED  
 WITH TOWN & COUNTRY  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-ANDREW STOUT SURV 135 ABST 2695

X135-999-0000-0100 34 R-4 Z9-U S A TOPO -ROLLING \$24,228-TV  
 U S RECLAMATION SERVICE R-RESIDENTIAL UTILITY-ELECTRICITY \$24,228-LV  
 109 N OREGON ST LAND AREA- 5.562AC EXEMPT -G GOVT ENTITY  
 EL PASO TX 79901-1148  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 1 (5.562 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-0500 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 REF-REFERENCE ACCT ONLY  
 R G E P & S F RAILROAD CO  
 310 SANTA FE BLDG  
 AMARILLO TX 79110-6646  
 \* RAILROAD  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 2 (2.227 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-0900 34 R-4 Z7-PEOPLE OF STATE OF TX ROAD TV-NEIGHBORHOOD  
 PEOPLE OF THE STATE OF TEXAS C-COMMERCIAL EXEMPT -G GOVT ENTITY  
 ANDREW STOUT SURV 135 ABST 2695 LAND AREA- 1.781AC  
 TR 3 (1.781 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

L02

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS							
*PROPERTY LOCATION							
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				

EL PASO

**TRV**

PARCEL

\*PROPER

X140

X146-00

\*271

X146-00

\*150

X146-00

\*151

EL PASO

**TRV**

PARCEL

396

VALUE-TV  
VALUE-LV  
VALUE-IV  
VALUE-BV  
VALUE-AV

304-TV  
370-LV  
349-BV

305-TV  
305-LV

307-TV  
305-LV  
302-IV

313-TV  
305-LV  
3858-IV

1996 reserved

VALUE-TV  
VALUE-LV  
VALUE-IV

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS						AGRIC VALUE-AV

X135-ANDREW STOUT SURV 135 ABST 2695

X135-999-0000-1300 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 4 (0.23 ACRE) CARRIED WITH 5  
 TO 8 OF 1 BUENA VISTA  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-1700 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 5 (35.576 ACRES) CARRIED WITH  
 BUENA VISTA  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-2100 34 R-4 C1-RES VAC LOT/TR < 5AC TOPO -ARROYO \$795-TV  
 SANDERSON ANTIS U R-RESIDENTIAL ROAD TY-PAVED \$795-LV  
 226 MARICOPA DR  
 EL PASO TX 79912-4402  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 6 (0.265 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-2500 34 R-4 C1-RES VAC LOT/TR < 5AC FOUND -CONCRETE SLAB 01/79 \$2,346-TV  
 VILLALOBOS DAVID & MIGUEL R-RESIDENTIAL TOPO -HIGH 963-0350 \$2,346-LV  
 VILLALOBOS PHIL  
 815 N PIEDRAS ST  
 EL PASO TX 79903-4007  
 CALLE SANTA ROSA ST  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 7-A (0.782 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

M02

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS						AGRIC VALUE-AV

EL PASO

TRW

PARCEL I

\*PROPERTY

X146

X146-001

\*151

X146-001

PHONE  
#271

X146-001

\*141

X146-001

PHONE  
#283

EL PASO

TRW

PARCEL I

\*PROPERTY

EL PASO (CAD), TX.

M02

EL PASO (CA

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-2900 34 R-4 C1-RES VAC LOT/TR < 5AC TOPO -HIGH 01/79 \$594-TV  
 VILLALOBOS DAVID & MIGUEL R-RESIDENTIAL 963-0350 \$594-LV  
 VILLALOBOS PHIL LAND AREA- .198AC UTILITY-ELEC GAS SEPT  
 315 N PIEDRAS ST  
 EL PASO TX 79903-4007  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 7-B (0.198 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-3300 34 R-4 A1-RES SINGLE FAMILY FOUND -CONCRETE SLAB BATHS - 2.0 \$24,471-TV  
 CARMONA VICENTE & REBECCA F 003-RES CLASS 003 EXT FIN-STUCCO/MASONRY FIREPL - 1 \$1,566-LV  
 335 NOPAL AVE R-RESIDENTIAL RF TYPE-GABLE \$22,905-IV  
 EL PASO TX 79922-1508 LAND AREA- 1,355SF RF MAT -COMPOSITION SHG  
 \*335 NOPAL AVE LAND AREA- .522AC HEATING-GAS STOVE  
 ANDREW STOUT SURV 135 ABST 2695 MAIN BLDG- 1,355SF COOLING-EVAPORATIVE-AIR  
 TR 8 (0.143 ACRE) & TR 9-B (0.379 ADJ BLDG- 1,355SF INT FIN-PLASTER  
 ACRE) EX FRPL 3 4 7 1UN FLOOR -TILE  
 IEP-EL PASCO I.S.D. EXEMPT -HD HS & SS DIS  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-3700 34 A1-RES SINGLE FAMILY FOUND -PIER AND BEAM BATHS - 1.0 12/80 \$19,992-TV  
 HERNANDEZ PILAR 002--CLS 002- NO EVAP EXT FIN-ADOBE 1135-0722 \$1,770-LV  
 329 SANTA ROSA ST R-RESIDENTIAL EXT FIN-STUCCO SIDING PRIOR: \$18,222-IV  
 EL PASO TX 79922-1512 LAND AREA- 543SF RF TYPE-FLAT 04/04/77  
 \*329 CALLE SANTA ROSA ST LAND AREA- .590AC RF MAT -COMPOSITION SHG 779-0301  
 ANDREW STOUT SURV 135 ABST 2695 MAIN BLDG- 543SF HEATING-SPACE HEATING  
 TR 9-A (0.590 ACRE) ADJ BLDG- 543SF COOLING-EVAPORATIVE-AIR  
 IEP-EL PASCO I.S.D. INT FIN-PLASTER  
 CEP-CITY OF EL PASO FLOOR -TILE  
 SCC-EL PASO COMM COLLEGE TOPO -LEVEL  
 SHO-THOMASON GEN HOSP ROAD TY-PAVED  
 EXEMPT -H HOMESTEAD

A1-RES SINGLE FAMILY FOUND -PIER AND BEAM CARD NO- 2 \$5,261-BV  
 002--CLS 002- NO EVAP EXT FIN-ADOBE BATHS - 1.0  
 R-RESIDENTIAL EXT FIN-STUCCO SIDING  
 LAND AREA- 1,008SF RF TYPE-FLAT  
 LAND AREA- .590AC RF MAT -COMPOSITION SHG  
 MAIN BLDG- 936SF HEATING-SPACE HEATING  
 ADJ BLDG- 936SF COOLING-EVAPORATIVE-AIR  
 COVERED PATIO 290SF INT FIN-PLASTER  
 FLOOR -TILE  
 TOPO -LEVEL  
 ROAD TY-PAVED  
 EXEMPT -H HOMESTEAD

EL PASO (CAD), TX.

N02

EL PASO (CA

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
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**TRW·I**

PARCEL NUM	OWN	M	*PROPERTY I	LEC
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**X146-**

X146-000-01  
SMIT  
75  
C/  
\*228  
W I  
3-I

X146-000-00  
CARR  
25  
EL  
\*234  
W F  
3-I

X146-000-00  
LENT  
ST  
EL  
\*240  
W F  
3-B

X146-000-00  
HECK  
PO  
AN  
\*241  
W F  
3-B

**TRW·F**

PARCEL NUMP

**TRW-REDI**

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES			AGRIC VALUE-AV	

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-3700      34      A1-RES SINGLE FAMILY      FOUND -PIER AND BEAM      CARD NO- 3      \*CONTINUED\*      \$19,992-TV  
 HERNANDEZ PILAR      002--CLS 002- NO EVAP      EXT FIN-ADOBE      BATHS - 1.0      \$1,770-LV  
 \*329      CALLE SANTA ROSA ST      R-RESIDENTIAL      EXT FIN-STUCCO SIDING      \$10,104-BV  
 LAND AREA- 1,270SF      RF TYPE-FLAT

LAND AREA- .590AC      RF MAT -COMPOSITION SHG  
 MAIN BLDG- 1,222SF      HEATING-SPACE HEATING  
 ADJ BLDG- 1,222SF      COOLING-EVAPORATIVE-AIR  
 COVERED PATIO 195SF      INT FIN-PLASTER  
 FLOOR -TILE  
 TOPO -LEVEL  
 ROAD TY-PAVED  
 EXEMPT -H      HOMESTEAD

X135-999-0000-3900      34      Y9-REFERENCE      EXEMPT -R      REFER ACCT  
 9 REFERENCE      REF-REFERENCE ACCT ONLY

ANDREW STOUT SURV 135 ABST 2695  
 TR 9-B (0.379 ACRE) CARRIED WITH  
 8  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-4100      34      A1-RES SINGLE FAMILY      FOUND -PIER AND BEAM      BATHS - 1.0      06/10/85      \$7,790-TV  
 FIERRO SEVERO & ROSARIO LE      002--CLS 002- NO EVAP      EXT FIN-ADOBE      1574-1431      \$567-LV  
 CABRALEZ BENJAMIN      R-RESIDENTIAL      EXT FIN-STUCCO SIDING      \$7,223-IV  
 LAND AREA- 737SF      RF TYPE-FLAT

LAND AREA- .189AC      RF MAT -ROLL COMPOSITN  
 MAIN BLDG- 499SF      HEATING-SPACE HEATING  
 ADJ BLDG- 499SF      COOLING-EVAPORATIVE-AIR  
 STORAGE 476SF      INT FIN-PLASTER  
 FLOOR -CONCRETE  
 FLOOR -TILE  
 TOPO -LEVEL

\*335      EL PASO TX 79922-1505  
 CALLE SANTA ROSA ST  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 10 (.189 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

A1-RES SINGLE FAMILY      FOUND -PIER AND BEAM      CARD NO- 2      \$3,364-BV  
 002--CLS 002- NO EVAP      EXT FIN-ADOBE      BATHS - 1.0

R-RESIDENTIAL      EXT FIN-STUCCO SIDING  
 LAND AREA- 796SF      RF TYPE-FLAT  
 LAND AREA- .189AC      RF MAT -ROLL COMPOSITN  
 MAIN BLDG- 635SF      HEATING-SPACE HEATING  
 ADJ BLDG- 635SF      COOLING-EVAPORATIVE-AIR  
 OPEN PORCH 161SF      INT FIN-PLASTER  
 FLOOR -CONCRETE  
 FLOOR -TILE  
 TOPO -LEVEL

**TRW-REDI**

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES			AGRIC VALUE-AV	

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-4500      34      R-4      J3-UTILS/ELECTRIC CO      ROAD TY-NEIGHBORHOOD      \$6,795-TV

**TRW**

PARCEL N: C

\*PROPERTY

**X146**

X146-000 M

\*235

X146-000 A

\*229

X146-000 M

\*207

X146-000 M

\*206

**TRW**

PARCEL N: O

\*PROPERTY

**X146**

X146-000 M

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
Mailing Address			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X135-ANDREW STOUT SURV 135 ABST 2695

X135-999-0000-4500	34	R-4	J3-UTILS/ELECTRIC CO	ROAD TY-NEIGHBORHOOD			\$6,795-TV
EL PASO ELECTRIC CO			C-COMMERCIAL				\$6,795-LV
303 N OREGON ST			LAND AREA-	3.120AC			
EL PASO TX 79901-1329							

\* NOPAL AVE  
ANDREW STOUT SURV 135 ABST 2695  
TR 11 (3.120 ACRES)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X135-999-1000-4900	34	R-4	A1-RES SINGLE FAMILY	FOUND -CONCRETE SLAB	YR BLT -1955	06/07/61	\$38,609-TV
RAMIREZ DANIEL & ADELINA R			007+-RES CLASS 007+	EXT FIN-STUCCO/MASONRY	BATHS - 2.0	D - -	\$639-LV
361 SANTA ROSA ST			R-RESIDENTIAL	RF TYPE-FLAT	FIREPL - 1		\$37,970-IV
EL PASO TX 79922-1512			LAND AREA-	RF MAT -ROLL COMPOSITN			
CALLE SANTA ROSA ST			.213AC	HEATING-GAS STOVE			
ANDREW STOUT SURV 135 ABST 2695			MAIN BLDG-	COOLING-EVAPORATIVE-AIR			
TR 12 (0.213 ACRE)			1,641SF	INT FIN-SHEET ROCK			
			ADJ BLDG-	FLOOR -ASPHALT TILE			
			1,641SF	TOPO -SLOPE			
			CARPOR	ROAD TY-DIRT			
			1,014SF	UTILITY-ELEC GAS SEPT			
			189SF	EXEMPT -HZ HS/65+/TX D			
			168SF				

\*361 IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X135-999-0000-5300	34	R-4	A1-RES SINGLE FAMILY	FOUND -CONCRETE SLAB	YR BLT -1940		\$8,708-TV
ROBLES DANIEL F			002--CLS 002- NO EVAP	EXT FIN-ADOBE	BATHS - 1.0		\$1,530-LV
365 SANTA ROSA ST			R-RESIDENTIAL	EXT FIN-STUCCO SIDING			\$7,178-IV
EL PASO TX 79922-1512			LAND AREA-	RF TYPE-FLAT			
PHONE #(915)-581-6156			1,112SF	RF MAT -ROLL COMPOSITN			
CALLE SANTA ROSA ST			.510AC	HEATING-GAS STOVE			
ANDREW STOUT SURV 135 ABST 2695			MAIN BLDG-	COOLING-EVAPORATIVE-AIR			
TR 13-A (0.510 ACRE)			1,002SF	INT FIN-SHEET ROCK			
			ADJ BLDG-	FLOOR -TILE			
			1,002SF	TOPO -SLOPE			
			110SF	ROAD TY-DIRT			
				UTILITY-ELEC GAS SEPT			
				EXEMPT -H HOMESTEAD			

\*365 IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X135-999-0000-5700	34	R-4	A1-RES SINGLE FAMILY	FOUND -PIER AND BEAM	YR BLT -1955	10/07/92	\$4,847-TV
ANDRADE EDUARDO & LOREIJO			002--CLS 002- NO EVAP	EXT FIN-STUCCO SIDING	BATHS - 1.0	Q - -	\$297-LV
4227 TYLER ST			R-RESIDENTIAL	RF TYPE-GABLE	FIREPL - 1	2484-0966	\$4,550-IV
RIVERSIDE CA 92503-3405			LAND AREA-	RF MAT -ROLL COMPOSITN		PRIOR:	
CALLE SANTA ROSA ST			901SF	HEATING-GAS STOVE		10/23/91	
ANDREW STOUT SURV 135 ABST 2695			.099AC	COOLING-EVAPORATIVE-AIR		H - -	
TR 13-B (0.099 ACRE)			789SF	INT FIN-PLASTER		2484-0968	
			ADJ BLDG-	FLOOR -TILE			
			789SF	TOPO -SLOPE			
			EX FRPL 1 2 6	ROAD TY-DIRT			
			1UN	UTILITY-ELEC GAS SEPT			
			126SF				
			81SF				

\*369 IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

P02

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
Mailing Address			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X135-ANDREW STOUT SURV 135 ABST 2695

X135-999-0000-6100	34	R-4	Z2-CHURCHES	FOUND -CONCRETE SLAB	BATHS - 1.0	09/83	\$16,608-TV
CATHOLIC DIOCESE OF EL PASO			003--RES CLASS 003-	EXT FIN-STUCCO/MASONRY		1382-0739	\$603-LV
499 SAINT MATTHEWS ST			R-RESIDENTIAL	RF TYPE-GABLE			\$16,005-IV
EL PASO TX 79907-6216			LAND AREA-				

EL PASO (CAD), TX.

P02

EL PASO (CA

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-6100	34	R-4	Z2-CHURCHES	FOUND -CONCRETE SLAB	BATHS - 1.0	09/83	\$16,608-TV
CATHOLIC DIOCESE OF EL PASO			003--RES CLASS 003-	EXT FIN-STUCCO/MASONRY		1382-0739	\$603-LV
499 SAINT MATTHEWS ST			R-RESIDENTIAL	RF TYPE-GABLE			\$16,005-IV
EL PASO TX 79907-4214			LAND AREA- 1,624SF	RF MAT -COMPOSITION SHG			
*3400 ZAPAL AVE			LAND AREA- .201AC	HEATING-SPACE HEATING			
ANDREW STOUT SURV 135 ABST 2695			MAIN BLDG- 700SF	COOLING-EVAPORATIVE-AIR			
TR 14 (0.201 AC)			ADJ BLDG- 700SF	INT FIN-PLASTER			
IEP-EL PASCO I.S.D.			OPEN PORCH 84SF	FLOOR -TILE			
CEP-CITY OF EL PASO			CANOPY 280SF	TOPO -LEVEL			
SCC-EL PASO COMM COLLEGE			CANOPY 560SF	UTILITY-ELEC GAS WATER			
SHO-THOMASON GEN HOSP				EXEMPT -P PARSN/CHRCH			

X135-999-0000-6600	34	R-4	Z1-ALL ENTITIES	ROAD TY-NEIGHBORHOOD		02/77	
CITY OF EL PASO			C-COMMERCIAL	EXEMPT -G GOVT ENTITY		758-0527	
2 CIVIC CENTER PLZ			LAND AREA- 3.215AC				
EL PASO TX 79901-1124							
ANDREW STOUT SURV 135 ABST 2695							
PT OF TR 15 (3.215 ACRES)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X135-999-0000-6900	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE			REF-REFERENCE ACCT ONLY				
ANDREW STOUT SURV 135 ABST 2695			LAND AREA- 4.111AC				
TR 16 (4.1112 ACRES) CARRIED WITH							
BUENA VISTA							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X135-999-0000-7300	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
EL PASO ELECTRIC CO			REF-REFERENCE ACCT ONLY				
303 N OREGON ST			LAND AREA- .815AC				
EL PASO TX 79901-1329							
ANDREW STOUT SURV 135 ABST 2695							
TR 17 (0.815 ACRE) ACREAGE							
CARRIED WITH TR 3 IN W C MORGAN							
SUR 237							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

Q02

EL PASO (CA

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**TRW-R**

PARCEL NUMBER  
OWNER  
MAILING ADDRESS  
\*PROPERTY LOCATION  
LEGAL

X146-000-00  
ACUN  
C/  
40  
EL  
\*191  
W F  
3-B

X146-000-00  
MCDO  
27  
AN  
\*283  
W F  
3-B

X146-000-00  
MC D  
27  
AN  
\*277  
W F  
3-B

X146-000-00  
FRAN  
25  
AN  
\*259  
W F  
3-B

EL PASO (CAD), TX.

Q02

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL DATA	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS		SALE DATE	LAND VALUE-LV
Mailing Address			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-7700 34 Y9-REFERENCE EXLMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 18 (1.13P ACRES) CARRIED WITH  
 BUENA VISTA  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-8100 34 R-4 Z1-ALL ENTITIES ROAD TY-NEIGHBORHOOD 06/78  
 CITY OF EL PASO C-COMMERCIAL EXEMPT -G GOVT ENTITY 902-0438  
 2 CIVIC CENTER PLZ  
 EL PASO TX 79901-1124  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 19 2.5579 ACRES  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-8500 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 EL PASO ELECTRIC CO REF-REFERENCE ACCT ONLY  
 303 N OREGON ST LAND AREA- 1.328AC  
 EL PASO TX 79901-1329  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 20 (1.328 ACRES) ACREAGE  
 CARRIED WITH TR 3 W C MORGAN SUR  
 237  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X135-999-0000-8900 34 R-4 C1-RES VAC LOT. TR < 5AC TOPO -ROLLING \$2,826-TV  
 COSTA LOURDES F R-RESIDENTIAL UTILITY-ELECTRICITY \$2,826-LV  
 2569 V F W ST LAND AREA- .942AC  
 EL PASO TX 79922-6646  
 ANDREW STOUT SURV 135 ABST 2695  
 TR 21 (0.942 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

R02

**TRW·F**

PARCEL NUMBER	OWNER	PROPERTY LOCATION	LEGAL
---------------	-------	-------------------	-------

**X146-V**

X146-000-00  
 COLE  
 60  
 EL  
 \*7874 W F  
 ONL

X146-000-00  
 GRAY  
 ST/  
 AN  
 \*171 W F  
 3-B

X146-000-00  
 JOHNS  
 C/C  
 586  
 EL  
 PHONE #(9)  
 \*161 W F  
 3-B

EL PASO (CAD

GRID	PARCEL NUMBER
B02	X132-999-0000-0127
C02	X132-999-0000-0152
D02	X132-999-0000-0161
E02	X132-999-0000-0200
F02	X132-999-0000-0200

GRID	PARCEL NUMBER
K02	X134-999-0000-0400
L02	X134-999-0000-0100
M02	X135-999-0000-1300
N02	X135-999-0000-2900



GRID	PARCEL
B03	X135-99
C03	X140-99
D03	X140-99
E03	X140-99

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LAND VALUE-TV  
LAND VALUE-LV  
PRV VALUE-IV  
LDG VALUE-BV  
AGRIC VALUE-AV

\$1,158,156-TV  
\$434,118-LV  
\$724,038-IV

\$260,800-TV  
\$176,418-LV  
\$84,382-IV

\$56,051-TV  
\$56,051-LV

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LAND VALUE-TV  
LAND VALUE-LV  
PRV VALUE-IV  
LDG VALUE-BV  
AGRIC VALUE-AV

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE	TOTAL VALUE-TV LAND VALUE-LV
OWNERS NAME MAILING ADDR.			PROPERTY TYPE			D-S-F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION LEGAL DESC		TAX DISTRICTS	LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV AGRIC VALUE-AV

**X135-ANDREW STOUT SURV 135 ABST 2695**

X135-999-0000-9300	34	R-4	C1-RES VAC LOT/TR < 5AC R-RESIDENTIAL	TOPO -ROLLING UTILITY-ELECTRICITY			\$315-TV \$315-LV
COSTA LOURDES F 2569 V F W ST EL PASO TX 79922-6646			LAND AREA- .105AC				
ANDREW STOUT SURV 135 ABST 2695 TR 22 (0.105 ACRE) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

**X140-AL WALTON SURV 140 ABST 2714**

X140-999-0000-0100	34	M-2	Z9-U S A R-RESIDENTIAL	EXEMPT -G	GOVT ENTITY		
U S RECLAMATION SERVICE 109 N OREGON ST EL PASO TX 79901-1148							
AL WALTON SURV 140 ABST 2714 TR 1 (1.687 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X140-999-0000-1100	34		Y9-REFERENCE REF-REFERENCE ACCT ONLY	EXEMPT -R	REFER ACCT		
R G E P & S F RAILROAD CO 310 SANTA FE BLDG AMARILLO TX 79110-6646							
* AL WALTON SURV 140 ABST 2714 TR 2 (1.623 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X140-999-0000-2100	34	M-2	Z7-PEOPLE OF STATE OF TX C-COMMERCIAL	EXEMPT -G	GOVT ENTITY		
PEOPLE OF THE STATE OF TEXAS AL WALTON SURV 140 ABST 2714 TR 3 (1.683 ACRES)			LAND AREA- 1.683AC				
IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

B03

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE	TOTAL VALUE-TV LAND VALUE-LV
OWNERS NAME MAILING ADDRESS			PROPERTY TYPE				
*PROPERTY LOCATION							

T

PARC

\*PRC

X1

X140

\*212

X140

\*131

X146

\*191

EL P.

T

PARC



EL PASO (CAD), TX.

B13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-0200	34		Y9-REFERENCE				
9 REFERENCE			REF-REFERENCE ACCT ONLY	EXEMPT -R	REFER ACCT		
BARKER SURV 10 ABST #7 TR 2-A (390.928 ACRES) CARRIED WITH 1 IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

\$51,318-TV  
\$51,318-LV

X010-999-0000-0205	34	M-3	Z2-CHURCHES		TOPO -LEVEL		\$387-TV
CATHOLIC DIOCESE OF EL PASO			C-COMMERCIAL		ROAD TY-NEIGHBORHOOD		\$387-LV
499 SAINT MATTHEWS ST			LAND AREA- .089AC		UTILITY-ELECTRICITY		
EL PASO TX 79907-4214					EXEMPT -X CEMETARIES		
* EXECUTIVE CENTER BARKER SURV 10 ABST #7 PT OF TR 2-C (0.089 ACRE) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

\$211,086-TV  
\$211,086-LV

X010-999-0000-0210	34	M-3	Z2-CHURCHES		TOPO -LEVEL	06/70	\$2,787-TV
METZGER S M			C-COMMERCIAL		ROAD TY-NEIGHBORHOOD	300-0009	\$2,787-LV
C/O CATHOLIC DIOCESE OF EL PASO			LAND AREA- .640AC		UTILITY-ELECTRICITY		
499 SAINT MATTHEWS ST					EXEMPT -P PARSN/CHRCH		
EL PASO TX 79907-4214							
* EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 2-B (0.640 ACRE) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

\$53,156-TV  
\$53,156-LV

X010-999-0000-0220	34	M-3	C2-COMMERCIAL	VACANT LOT ROAD TY-NEIGHBORHOOD		08/76	\$9,245-TV
A S A R C O INC			C-COMMERCIAL			1223-1506	\$9,245-LV
C/O PO BOX 26903			LAND AREA- .283AC				
EL PASO TX 79926-6903							
* EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 2-C (0.283 ACRE) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

C13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

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E TOTAL VALUE-TV  
LAND VALUE-LV  
S IMPRV VALUE-IV  
BLDG VALUE-BV  
AGRIC VALUE-AV

EL PASO (CAD), TX.

C13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			-S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-0300	34	M-1	C2-COMMERCIAL VACANT LOT	TOPO -ROLLING		06/81	\$116,518-TV
LIVINGSTON JOHN H			C-COMMERCIAL	ROAD TY-NEIGHBORHOOD		1182-1473	\$116,518-LV
PO BOX 1180			LAND AREA- 17.832AC	UTILITY-ELECTRICITY			
SUNLAND PARK NM 88063-1180							
* INTERSTATE 10							
BARKER SURV #10 TR 3 (17.8326 AC)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X010-999-0000-0310	34	M-1	C2-COMMERCIAL VACANT LOT	TOPO -ROLLING		08/02/89	\$39,686-TV
MBANK			C-COMMERCIAL	ROAD TY-NEIGHBORHOOD		F - -	\$39,686-LV
C/O BATKIN MIKE			LAND AREA- 5.694AC	UTILITY-ELECTRICITY		2082-0848	
PO BOX 1072						PRIOR:	
EL PASO TX 79958-0001						10/79	
* INTERSTATE 10						1027-0538	
BARKER SURV 10 ABST #7 TR 3-A							
(24.804 ACRES)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X010-999-0000-0400	34	M-3	C2-COMMERCIAL VACANT LOT	TOPO -ROLLING		06/81	\$120,387-TV
LIVINGSTON JOHN H			C-COMMERCIAL	ROAD TY-NEIGHBORHOOD		1182-1473	\$120,387-LV
PO BOX 1180			LAND AREA- 6.909AC	UTILITY-ELECTRICITY		PRIOR:	
SUNLAND PARK NM 88063-1180						10/04/79	
* INTERSTATE 10						1027-0541	
BARKER SURV #10 TR 4 (6.9093 AC)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X010-999-0000-0500	34	M-3	Z6-EL PASO PUBLIC SVC BD	TOPO -ROUGH		08/12/83	
EL PASO PUBLIC SERVICE BOARD			C-COMMERCIAL	ROAD TY-INTERSTATE HWY			
320 S CAMPBELL ST			LAND AREA- 23.065AC	UTILITY-ELEC GAS WATER			
EL PASO TX 79901-2840				EXEMPT -G GOVT ENTITY			
* INTERSTATE 10							
BARKER SURV 10 ABST #7 TR 5							
23.0658 ACRES							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

D13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			-S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA				BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

EL PASO

**TRV**

PARCEL

\*PROPER

X011

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X011-99

PHONE  
#320

EL PASO

**TRV**

PARCEL

\*PROPER

1996  
Reserved

VALUE-TV  
VALUE-LV  
VALUE-IV  
VALUE-BV  
VALUE-AV

682-TV  
682-LV

1996  
Reserved

VALUE-TV  
VALUE-LV  
VALUE-IV  
VALUE-BV  
VALUE-AV

EL PASO (CAD), TX.

D13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
Mailing Address			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-0550 34 M-3 C2-COMMERCIAL VACANT LOT ROAD TY-BUSINESS CLUSTR  
 JOBE CONCRETE PRODUCTS INC  
 1 MCKELLIGON CANYON RD  
 EL PASO TX 79930-2634  
 INTERSTATE 10  
 BARKER SURV 10 ABST #7  
 5-A(10.4272AC)&12-B(9.594AC)&  
 HARRISON SURV 54(301.34AC)&  
 CHRISTIAN SCHERTZ SUR 106(111.15AC)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

03/10/88 \$432,511-TV  
 W -AB-B \$432,511-LV  
 1901-0764  
 PRIOR:  
 \$62,500  
 03/31/87  
 W -D -  
 1806-0170

X010-999-0000-0600 34 M-3 Z6-EL PASO PUBLIC SVC BD TOPO -LEVEL  
 EL PASO PUBLIC SERVICE BOARD C-COMMERCIAL ROAD TY-INTERSTATE HWY  
 320 S CAMPBELL ST LAND AREA- 33.843AC UTILITY-NONE  
 EL PASO TX 79901-2840 EXEMPT -G GOVT ENTITY  
 INTERSTATE 10  
 BARKER SURV 10 ABST #7 TR 6  
 (33.8435 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

08/12/83

X010-999-0000-0601 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 GENERAL TRK LEASING & RENTAL REF-REFERENCE ACCT ONLY  
 777 EXECUTIVE CENTER BLVD  
 EL PASO TX 79922  
 BARKER SURV #10 IMPS ONLY ON TR 6  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

07/01/85 \$141,423-TV  
 \$141,423-IV

X010-999-0000-0603 34 Z6-EL PASO PUBLIC SVC BD EXEMPT -G GOVT ENTITY  
 EL PASO PUBLIC SERVICE BOARD C-COMMERCIAL  
 320 S CAMPBELL ST LAND AREA- 4.218AC  
 EL PASO TX 79901-2840  
 INTERSTATE 10  
 BARKER SURV 10 ABST #7 4.2185  
 ACRES OUT OF TR 6 4.2185 ACRES  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

07/14/87 \$67,591-TV  
 PRIOR: \$67,591-IV  
 12/24/85

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV

EL PASO

**TRW**

PARCEL

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EL PASO

**TRW**

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1996 reserved

VALUE-TV  
VALUE-LV  
VALUE-IV  
VALUE-BV  
VALUE-AV

2,422-TV  
1,146-LV  
1,276-IV

0,528-BV

4,288-BV

6,541-TV  
8,780-LV  
7,761-IV

1996 reserved

VALUE-TV  
VALUE-LV

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE LAND AREA EXTRA FEATURES	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE D -S -F CDS BOOK-PAGE	TOTAL VALUE-TV LAND VALUE-LV IMPRV VALUE-IV BLDG VALUE-BV AGRIC VALUE-AV
<b>X010-BARKER SURV 10 ABST 07</b>							
X010-999-0000-0700	34	M-3	C2-COMMERCIAL VACANT LOT C-COMMERCIAL LAND AREA- 4.658AC	TOPO -ROLLING ROAD TY-BUSINESS CLUSTR UTILITY-ELECTRICITY		12/10/91 W - - 2405-0429 PRIOR: \$90,000 11/30/89 *P-BF-F 2123-1977	\$89,288-TV \$89,288-LV
* COCA ERNEST & BERTHA 8761 ALAMEDA AVE EL PASO TX 79907-6233 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 7-A (4.6586 AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							
X010-999-0000-0705	34	M-3	Z1-ALL ENTITIES C-COMMERCIAL LAND AREA- .0164C	TOPO -ROLLING ROAD TY-BUSINESS CLUSTR UTILITY-ELECTRICITY EXEMPT -G GOVT ENTITY		11/26/90 Q - - 2246-1399 PRIOR: 11/25/90	\$314-TV \$314-LV
* CITY OF EL PASO 2 CIVIC CENTER PLZ EL PASO TX 79901-1124 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 7-A-1 (0.0164 AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							
X010-999-0000-0710	34	M-3	Z3-CHARITABLE INSTS C-COMMERCIAL LAND AREA- 6.390AC	ROAD TY-INTERSTATE HWY EXEMPT -C CHARIT INST			
* CATHOLIC DIOCESE OF EL PASO 499 SAINT MATTHEWS ST EL PASO TX 79907-4214 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 7-B (6.390 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							
X010-999-0000-0800	34	R-3	J3-UTILS/ELECTRIC CG C-COMMERCIAL LAND AREA- 3.935AC	ROAD TY-NEIGHBORHOOD			\$34,281-TV \$34,281-LV
* EL PASO ELECTRIC CO 303 N OREGON ST EL PASO TX 79901-1329 INTERSTATE 10 BARKER SURV 10 ABST #7 TR 8 (3.935 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE	TOTAL VALUE-TV LAND VALUE-LV
<b>X011-999-0722</b>							

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EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
	TAX DISTRICTS		LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

X010-BARKER SURV 10 ABST 07

X010-999-0000-0900 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 9  
 (11.634 ACRES) & 10 (6.212 ACRES)  
 & 11 (14.249 ACRES) CAR- RIED  
 WITH EXECUTIVE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1200 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 12-A  
 (5.552 ACRES) CARRIED WITH 1  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1211 34 M-3 F1-COMM OTHR THAN F2-F9 BASEMNT-UNFINISHED BSMT 03/19/93 \$7,690-TV  
 C-COMMERCIAL ROAD TY-BUSINESS CLUSTR \$7,690-IV  
 METRO MOBILE CTS PF EL PASO  
 C/O BRENNAN PATRICK J  
 645 EXECUTIVE CENTER BLVD  
 EL PASO TX 79922-1602  
 \*645 EXECUTIVE CENTER BLVD  
 BARKER SURV 10 ABST #7 IMPS ONLY  
 ON TR 12-B  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1300 34 M-3 C2-COMMERCIAL VACANT LOT ROAD TY-BUSINESS CLUSTR \$24,584-TV  
 C-COMMERCIAL \$24,584-LV  
 KNAPP R E & R A  
 13781 HORIZON BLVD  
 EL PASO TX 79927-5802  
 \* EXECUTIVE CENTER  
 BARKER SURV 10 ABST #7 TR 13  
 (0.75 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1400 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 14 (1  
 ACRE) CARRIED WITH 4 & E 20.82 FT  
 OF 5 OF A EXECUTIVE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
	TAX DISTRICTS		LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

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X010-999-0000-1400 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 14 (1  
 ACRE) CARRIED WITH 4 & E 20.82 FT  
 OF 5 OF A EXECUTIVE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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EL PASO (

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
LEGAL DESC	TAX DISTRICTS		LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

X010-BARKER SURV 10 ABST 07

X010-999-0000-1500 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 15-A  
 (0.349 ACRE) CARRIED WITH 1 OF A  
 EXECUTIVE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1510 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 15-B  
 (1.157 ACRES) CARRIED WITH E O  
 DRYER SURV 132  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1520 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 15-B-1  
 (0.579 ACRE) CARRIED WITH 2 & 3  
 OF A EXECUTIVE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

08/30/79  
 PRIOR:  
 08/04/79  
 1015-1416

X010-999-0000-1600 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 16  
 (8.515 ACRES) CARRIED WITH LA  
 CALAVERA SETTLEMENT  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
X010-999-0000-1700	34	M-3	F1-COMM OTHR THAN F2-F9	EXT FIN-BRICK	VR BLT -1975	10/07/92	\$187,751-TV
HERNANDEZ JAMES			ENDL-BAR LOUNGE FRAME	RF TYPE-GABLE			\$105,680-LV
533 EXECUTIVE CENTER BLVD			C-COMMERCIAL	RF MAT -ASPHALT SHINGLE		2495-2451	\$82,071-IV
EL PASO TX 79902-1018			LAND AREA- 3,972SF	HEATING-FORCED AIR		PRIOR:	
*533 EXECUTIVE CENTER			LAND AREA- .828AC	COOLING-EVAP COOLING		\$325,000	
BARKER SURV 10 ABST #7 TR 17-A			MAIN BLDG- 3,972SF	INT FIN-FIN, OPEN AREA		04/01/87	
(0.162 ACRE) & TR 17-E (0.645			ADJ BLDG- 3,972SF	FLOOR -CARPETING		*P-AU-	
ACRE) & TR 17-K (0.021 ACRE)			OFFICE AREA MTL 168SF	FLOOR -COMPOSITN TILE		1785-0624	
IEP-EL PASCO I.S.D.			YRD PAV BLK TOP 15,876SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO			SEC FENC MASON 180SF	TOPO -SLOPE			
SCC-EL PASO COMM COLLEGE			SEC FENC MASON 168SF	ROAD TY-BUSINESS CLUSTR			
SHO-THOMASON GEN HOSP			ANCILL BLDG BR 1,634SF	UTILITY-ELEC GAS WATER			

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
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PARCEL NUM

X010-999-0000-1700	34	M-3	F1-COMM OTHR THAN F2-F9 ENDL-BAR LOUNGE FRAME C-COMMERCIAL	EXT FIN-BRICK RF TYPE-GABLE RF MAT -ASPHALT SHINGLE HEATING-FORCED AIR COOLING-EVAP COOLING INT FIN-FIN, OPEN AREA FLOOR -CARPETING FLOOR -COMPOSITN TILE BASEMNT-UNFINISHED BSMT TOPO -SLOPE ROAD TY-BUSINESS CLUSTR UTILITY-ELEC GAS WATER	YR BLT -1975	10/07/92	\$187,751-TV \$105,680-LV \$82,071-IV
HERNANDEZ JAMES 533 EXECUTIVE CENTER BLVD EL PASO TX 79902-1018 *533 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 17-A (0.162 ACRE) & TR 17-E (0.645 ACRE) & TR 17-K (0.021 ACRE) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP			LAND AREA- 3,972SF LAND AREA- .828AC MAIN BLDG- 3,972SF ADJ BLDG- 3,972SF OFFICE AREA MTL 168SF YRD PAV BLK TOP 15,876SF SEC FENC MASON 180SF SEC FENC MASON 168SF ANCILL BLDG BR 1,634SF			2495-2451 PRIOR: \$325,000 04/01/87 *P-AU- 1785-0624	

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
	TAX DISTRICTS		LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV
<b>X010-BARKER SURV 10 ABST 07</b>							
X010-999-0000-1703	34	M-3	F3-COMM OFFICE BUILDING PFCL-182 STRY DET MASONRY C-COMMERCIAL	EXT FIN-BRICK RF TYPE-FLAT RF MAT -TAR & GRAVEL HEATING-FORCED AIR COOLING-CENTRAL AIR INT FIN-FIN, DIV AREA FLOOR -CARPETING FLOOR -COMPOSITN TILE BASEMNT-UNFINISHED BSMT TOPO -LEVEL ROAD TY-BUSINESS CLUSTR UTILITY-ELEC GAS WATER	YR BLT -1972	12/31/90	\$141,322-TV \$111,400-LV \$29,922-IV
KOGER EQUITY OF TEXAS INC 3986 BOULEVARD CENTER DR # 101 JACKSONVILLE FL 32207-2838 *433 EXECUTIVE CENTER BARKER SURV 10 ABST 7 TR 17-B (0.341 ACRE) & W 49.51 FT OF LOT 7 BLK A EXECUTIVE PARK IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP			LAND AREA- 4,096SF LAND AREA- .511AC MAIN BLDG- 4,096SF ADJ BLDG- 4,096SF YRD PAV BLK TOP 8,468SF YRD PAV CONC 900SF RETAIN WALL ROC 900SF			2272-1266 PRIOR: 10/80 1121-0559	
X010-999-0000-1705	34		V9-REFERENCE REF-REFERENCE ACCT ONLY	EXEMPT -R REFER ACCT			
9 REFERENCE BARKER SURV 10 ABST #7 TR 17-B-1 (0.186 ACRE) CARRIED WITH 17-F IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							
X010-999-0000-1708	34	M-3	C2-COMMERCIAL VACANT LOT C-COMMERCIAL	TOPO -LEVEL ROAD TY-BUSINESS CLUSTR UTILITY-ELEC GAS WATER		10/03/89	\$87,486-TV \$87,486-LV
ASARCO INC C/O PLANT MANAGER PO BOX 1111 EL PASO TX 79999-1111 *447 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 17-C (0.3090 AC) & 17-D-1 (0.4634 AC) (0.7724 AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP			LAND AREA- .772AC			2104-0980	
X010-999-0000-1711	34		F3-COMM OFFICE BUILDING C-COMMERCIAL	RF TYPE-GABLE RF MAT -COMPOS B-U REG HEATING-FORCED AIR COOLING-EVAP COOLING INT FIN-FIN, OPEN AREA FLOOR -COMPOSITN TILE BASEMNT-UNFINISHED BSMT TOPO -LEVEL			\$163,015-TV \$145,807-LV \$17,208-IV
KNAPP R E & R A 13781 HORIZON BLVD EL PASO TX 79927-5802 *447 EXECUTIVE CENTER BARKER SURV 10 ABST #7 TR 17-D (4.6324 AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP			LAND AREA- 1,344SF LAND AREA- 4.632AC MAIN BLDG- 1,344SF ADJ BLDG- 1,344SF SEC FENC BARBED 12,600SF ANCILL BLDG WD 1,120SF				

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		PROPERTY TYPE	EXTRA FEATURES		D -S -F CDS	IMPRV VALUE-IV
LEGAL DESC	TAX DISTRICTS		LAND AREA			BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-1715 34 M-3 C2-COMMERCIAL VACANT LOT ROAD TY-BUSINESS CLUSTR 04/26/91 \$11,464-TV  
 SCHUSTER LEO JR EL PASO TX 79902-1037 W - - 2321-1746 \$11,464-LV  
 501 EXECUTIVE CENTER BLVD  
 EL PASO TX 79902-1037  
 \* EXECUTIVE CENTER  
 BARKER SURV 10 ABST #7 TR 17-D-2  
 (0.2632 AC)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1720 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 17-E  
 (0.645 ACRE) CARRIED WITH 17-A  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1725 34 M-3 F1-COMM OTHR THAN F2-F9 EXT FIN-CONCRETE BLOCK VR BLT -1974 07/29/94 \$418,089-TV  
 EL PASO CENTER OF THE DEAF INC MRCL-RET STORE MASONRY RF TYPE-FLAT W - - \$210,006-LV  
 1005 E YANDELL DR C-COMMERCIAL RF MAT -TAR & GRAVEL 2774-0178 \$208,083-IV  
 EL PASO TX 79903-5429 LAND AREA- 10,287SF HEATING-FORCED AIR PRIOR:  
 \*511 EXECUTIVE CENTER LAND AREA- .803AC COOLING-CENTRAL AIR 12/27/91  
 BARKER SURV 10 ABST #7 TR 17-E-1 MAIN BLDG- 10,287SF INT FIN-FIN, OPEN AREA W - -  
 (0.708 ACRE) & TR 17-H (0.096 ADJ BLDG- 10,287SF FLOOR -CARPETING 2383-2084  
 ACRE) YRD PAV BLK TOP 19,569SF FLOOR -COMPOSITN TILE  
 IEP-EL PASCO I.S.D. YRD PAV CONC 1,610SF BASEMNT-UNFINISHED BSMT  
 CEP-CITY OF EL PASO SEC FENC MASON 1,504SF TOPO -LEVEL  
 SCC-EL PASO COMM COLLEGE ROAD TY-BUSINESS CLUSTR  
 SHO-THOMASON GEN HOSP UTILITY-ELEC GAS WATER

X010-999-0000-1730 34 M-3 F3-COMM OFFICE BUILDING EXT FIN-BRICK VR BLT -1986 12/01/86 \$381,129-TV  
 SCHUSTER MANAGEMENT CORP PFCA-182 STRY DET MASONRY RF TYPE-FLAT W -SD- \$134,334-LV  
 501 EXECUTIVE CENTER BLVD C-COMMERCIAL RF MAT -TAR & GRAVEL 1753-0279 \$246,795-IV  
 EL PASO TX 79902-1037 LAND AREA- 14,823SF HEATING-FORCED AIR  
 \*501 EXECUTIVE CENTER LAND AREA- .514AC COOLING-CENTRAL AIR  
 BARKER SURV 10 ABST #7 TR 17-E-2 MAIN BLDG- 4,606SF INT FIN-FIN, DIV AREA  
 (0.499 ACRE) & TR 17-J (0.015 ADJ BLDG- 9,212SF INT FIN-FIN, DIV AREA  
 ACRE) OFFICE AREA MTL 368SF FLOOR -CARPETING  
 IEP-EL PASCO I.S.D. OFFICE AREA MTL 1,071SF FLOOR -COMPOSITN TILE  
 CEP-CITY OF EL PASO OFFICE AREA MTL 434SF BASEMNT-UNFINISHED BSMT  
 SCC-EL PASO COMM COLLEGE YRD PAV BLK TOP 9,537SF TOPO -LEVEL  
 SHO-THOMASON GEN HOSP YRD PAV CONC 775SF ROAD TY-BUSINESS CLUSTR  
 SEC FENC MASON 624SF UTILITY-ELEC GAS WATER  
 SVC CANOP FIN S 264SF  
 SVC CANOP FIN S 324SF  
 ADDIT TO MAIN 5,611SF

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
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996

TV  
LV  
IV  
BV  
AV

99-IV  
89-IV

88-TV  
83-IV

440-BV

996

TV

EL PASO (

**TRW-**

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X011-999-  
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CEP-CITY OF EL PASO OFFICE AREA MTL 434SF BASEMNT-UNFINISHED BSMT  
 SCC-EL PASO COMM COLLEGE YRD PAV BLK TOP 9,537SF TOPO -LEVEL  
 SHO-THOMASON GEN HOSP YRD PAV CONC 775SF ROAD TV-BUSINESS CLSTR  
 SEC FENC MASON 624SF UTILITY-ELEC GAS WATER  
 SVC CANOP FIN S 264SF  
 SVC CANOP FIN S 324SF  
 ADDIT TO MAIN 5,611SF

EL PASO (CAD), TX.

J13

EL PASO (C

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV
<b>X010-BARKER SURV 10 ABST 07</b>							
X010-999-0000-1735	34	M-3	F3-COMM OFFICE BUILDING	EXT FIN-BRICK	YR BLT -1975	12/31/90	\$262,720-TV
KOGER EQUITY OF TEXAS INC			PFCA-1&2 STRY DET MASONRY	RF TYPE-FLAT			\$189,920-LV
3986 BOULEVARD CENTER DR # 101			C-COMMERCIAL	RF MAT -TAR & GRAVEL		2272-1266	\$72,800-IV
JACKSONVILLE FL 32207-2838			LAND AREA- 7,171SF	HEATING-FORCED AIR		PRIOR:	
*445 EXECUTIVE CENTER			LAND AREA- .872AC	COOLING-CENTRAL AIR		10/80	
BARKER SURV 10 ABST #7 TR 17-F			MAIN BLDG- 7,171SF	INT FIN-FIN, DIV AREA		1121-0559	
(0.663 ACRE) & TR 17-G (0.023			ADJ BLDG- 7,171SF	FLOOR -CARPETING			
ACRE) & TR 17-B-1 (0.186 ACRE)			YRD PAV BLK TOP 12,847SF	FLOOR -COMPOSITN TILE			
IEP-EL PASCO I.S.D.			YRD PAV CONC 1,775SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO				TOPO -LEVEL			
SCC-EL PASO COMM COLLEGE				ROAD TV-BUSINESS CLSTR			
SHO-THOMASON GEN HOSP				UTILITY-ELEC GAS WATER			
X010-999-0000-1740	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE			REF-REFERENCE ACCT ONLY				
BARKER SURV 10 ABST #7 TR 17-G							
(0.023 ACRE) CARRIED WITH 17-F							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							
X010-999-0000-1742	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE			REF-REFERENCE ACCT ONLY				
BARKER SURV 10 ABST #7 TR 17-H							
(0.096 ACRE) CARRIED WITH 17-E-1							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							
X010-999-0000-1744	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE			REF-REFERENCE ACCT ONLY				
BARKER SURV 10 ABST #7 TR 17-J							
(0.015 ACRE) CARRIED WITH 17-E-2							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							
X010-999-0000-1746	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE			REF-REFERENCE ACCT ONLY				
BARKER SURV 10 ABST #7 TR 17-F							
(0.021 ACRE) CARRIED WITH 17-A							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

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EL PASO (C

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV

TRW-REDI

PARCEL NUM

(0.021 ACRES) CARRIED WITH 17-A  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		PROPERTY TYPE	EXTRA FEATURES		D -S -F CDS	IMPRV VALUE-IV
	TAX DISTRICTS		LAND AREA			BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-1800 34 M-3 Z1-ALL ENTITIES TOPO -ROUGH \$34,400 \$17,502-TV  
 CITY OF EL PASO C-COMMERCIAL ROAD TY-NEIGHBORHOOD 05/29/87 \$17,502-LV  
 2 CIVIC CENTER PLZ LAND AREA- 5.740AC UTILITY-ELEC GAS WATER  
 EL PASO TX 79901-1124 INTERSTATE 10 EXEMPT -G GOVT ENTITY W -D - 1806-0167  
 \* BARKER SURV 10 ABST #7 TR 18  
 5.7400 ACRES  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-1900 34 M-3 J3-UTILS/ELECTRIC CO ROAD TY-NEIGHBORHOOD \$19,490-TV  
 EL PASO ELECTRIC CO C-COMMERCIAL 8.949AC \$19,490-LV  
 303 N OREGON ST  
 EL PASO TX 79901-1329 INTERSTATE 10  
 \* BARKER SURV 10 ABST #7 TR 19  
 (8.949 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-2000 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 BARKER SURV 10 ABST #7 TR 20-A  
 (196.009 ACRES) CARRIED WITH 1  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X010-999-0000-2005 34 M-3 C2-COMMERCIAL VACANT LOT ROAD TY-COMM/IND PARK 09/30/92 \$62,182-TV  
 CK PROPERTIES LC C-COMMERCIAL 2486-0668 \$62,182-LV  
 4487 N MESA ST # 204 LAND AREA- 5.710AC  
 EL PASO TX 79902-1149 N MESA ST  
 \* BARKER SURV 10 ABST #7  
 20-A-1(3.264 AC) & 20-B (2.446 AC)  
 (5.7100 AC)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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**TRW REDI**

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PARCEL NUMBER DIST ZONE LAND USE BUILDING FEATURES STATISTICAL DATA SALE PRICE TOTAL VALUE-TV

EL PASO (CAD)

**TRW REDI**

PARCEL NUMBER  
 OWNER:  
 MAIL:  
 \*PROPERTY LOC  
 LEGAL

**X011-E**

X011-999-0001  
 JOS EI  
 535:  
 EL I  
 \*5353 EI  
 E BEI  
 ACRES:

X011-999-0001  
 PASCH  
 808  
 EL I  
 \*143 CI  
 E BEI  
 ACRES:

EL PASO (CAD)

**TRW REDI**

PARCEL NUMBER

EL PASO (CAD), TX.

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EL PASO

**TRW-REDI**

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		LAND AREA	EXTRA FEATURES		D -S -F CDS	IMPRV VALUE-LV
	TAX DISTRICTS					BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-2010	34	M-3	C2-COMMERCIAL VACANT LOT ROAD TY-COMM/IND PARK				\$21,976-TV
A S A R C O INC	C/O PO BOX 26903		C-COMMERCIAL				\$21,976-LV
	EL PASO TX 79926-6903		LAND AREA-	2.018AC			

\* N MESA ST  
BARKER SURV 10 ABST #7 TR 20-C  
(2.018 ACRES)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X010-999-0000-2015	34	C-4	C2-COMMERCIAL VACANT LOT ROAD TY-COMM/IND PARK			09/30/92	\$6,908-TV
CK PROPERTIES L C	4487 N MESA ST # 204		C-COMMERCIAL			W - -	\$6,908-LV
	EL PASC TX 79902-1149		LAND AREA-	.634AC		2725-2131	

\* N MESA ST  
BARKER SURV 10 ABST #7 TR 20-B-1  
(0.6344 AC)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X010-999-0000-2100	34	M-3	D7-DESERT ACREAGE <5AC	TOPO	-ROLLING	10/01/90	\$11,764-TV
ARROYO HOLDINGS LTD	C/O FRASER MARY A & 2		R-RESIDENTIAL			W - -	\$11,764-LV
	114 CASTELLANO DR		LAND AREA-	2.352AC		2228-2171	

EL PASO TX 79912-6170  
BARKER SURV 10 ABST #7 TR 21  
(2.3528 ACRES)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X010-999-0000-2200	34	M-3	J3-UTILS/ELECTRIC CO	ROAD TY-NEIGHBORHOOD			\$1,117-TV
EL PASO ELECTRIC CO	303 N OREGON ST		C-COMMERCIAL				\$1,117-LV
	EL PASO TX 79901-1329		LAND AREA-	.513AC			

\* EXECUTIVE CENTER  
BARKER SURV 10 ABST #7 TR 22-A  
(0.513 ACRE)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

M13

EL PASO

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
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**TRW**

PARCEL N  
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BARKER SURV 10 ABST #7 TR 22-A  
(0.513 ACRE)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

M13

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X010-BARKER SURV 10 ABST 07

X010-999-0000-2205	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE							
BARKER SURV 10 ABST #7 TR 22-B (0.509 ACRE) CARRIED WITH E O DRYER SURV 132 IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X010-999-0000-2300	34	C-4	J3-UTILS/ELECTRIC CO	ROAD TY-NEIGHBORHOOD			\$3,404-TV
EL PASO ELECTRIC CO							
303 N OREGON ST							
EL PASO TX 79901-1329							
EXECUTIVE CENTER							
BARKER SURV 10 ABST #7 TR 23 (1.563 ACRES)							
IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X010-999-0000-2400	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
9 REFERENCE							
BARKER SURV 10 ABST #7 TR 24 (0.5 ACRE) & 25 (3.722 ACRES) CARRIED WITH 1							
IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X010-999-0000-2600	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
SOUTHERN PACIFIC RAILROAD CO							
C/O O SULLIVAN R R							
PO BOX 1319							
HOUSTON TX 77251-1319							
RR ROW							
BARKER SURV 10 ABST #7 TR 26 (33.22 ACRES)							
IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

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1996  
Reserved

VALUE-TV  
VALUE-LV  
VALUE-IV  
VALUE-BV  
VALUE-AV

24,496-TV  
18,480-LV  
6,016-IV

67,932-TV  
41,846-LV  
6,086-IV

647,091-BV

1996

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE	TOTAL VALUE-TV LAND VALUE-LV
OWNERS NAME			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
MAILING ADDRESS			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
*PROPERTY LOCATION		TAX DISTRICTS	EXTRA FEATURES				AGRIC VALUE-AV
LEGAL DESC							

**X010-BARKER SURV 10 ABST 07**

X010-999-0000-2750	34		Y9-REFERENCE	EXEMPT -R	REFER ACCT		
SANTA FE RAILROAD CO			REF-REFERENCE ACCT ONLY				
TAX DEPT							
AMARILLO TX 79171-6600							
RR ROW							
BARKER SURV 10 ABST #7 TR 27							
(11.03 ACRES)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X010-999-0000-2800	34	C-4	Z9-U S A	EXEMPT -G	GOVT ENTITY		\$51,744-TV
UNITED STATES GOVERNMENT			C-COMMERCIAL				\$51,744-LV
BARKER SURV 10 ABST #7 TR 28			LAND AREA- 11.879AC				
(11.879 ACRES)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

**X011-E BENNETT SURV 11**

X011-999-000A-0100	34	M-1	F7-COMMERCIAL WAREHSES	EXT FIN-PRE-CAST CONC	YR BLT -1967	08/04/90	\$2,332,748-TV
BROWN BRUCE W			ISCL-STG WHS MASONRY	RF TYPE-FLAT		- -	\$490,050-LV
C/O CAUGHRAN KERRY B			C-COMMERCIAL	RF MAT -METAL		2612-0642	\$1,842,698-IV
415 N MESA ST # 210			LAND AREA- 17,451SF	HEATING-FORCED AIR		PRIOR:	
EL PASO TX 79901-1244			LAND AREA- 5,000AC	COOLING-CENTRAL AIR		07/31/86	
N CONCEPCION ST			MAIN BLDG- 17,351SF	INT FIN-SEMI-FINISHED		1703-0645	
E BENNETT SURV 11 TR 1 (2.567 AC)			ADJ BLDG- 17,351SF	FLOOR -UNFINISHED			
8 ALL BLKS 11&12 S 81.3 FT OF 13			LOAD DOCK CONC 720SF	BASEMNT-UNFINISHED BSMT			
BRENTWOOD HTS & CLSD ST S ALY S			AUTO DOCK LEVEL 3UN				
IN&BTW(2.033 AC)			SVC CNPY EXP SO 1,986SF				
IEP-EL PASCO I.S.D.			SPRINK SYS EXPD 32,659SF				
CEP-CITY OF EL PASO			SEC FENC BARBED 15,300SF				
SCC-EL PASO COMM COLLEGE			ADJUSTED VALUE 1UN				
SHO-THOMASON GEN HOSP			ADDIT TO MAIN				

			F7-COMMERCIAL WAREHSES	EXT FIN-PRE-CAST CONC	CARD NO- 2		\$486,945-BV
			IZCL-COLD STORAGE STR B	RF TYPE-FLAT	YR BLT -1967		
			C-COMMERCIAL	RF MAT -METAL			
			LAND AREA- 36,673SF	HEATING-FORCED AIR			
			LAND AREA- 5,000AC	COOLING-CENTRAL AIR			
			MAIN BLDG- 36,673SF	INT FIN-SEMI-FINISHED			
			ADJ BLDG- 36,673SF	FLOOR -UNFINISHED			
			ADJUSTED VALUE 1UN	BASEMNT-UNFINISHED BSMT			

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE	TOTAL VALUE-TV LAND VALUE-LV
OWNERS NAME							

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TOTAL VALUE-TV  
LAND VALUE-LV  
IMPRV VALUE-IV  
BLDG VALUE-BV  
AGRIC VALUE-AV

\$2,087,932-TV  
\$1,041,846-LV  
\$128,655-BV

\$76,042-BV

\$553,725-TV  
\$304,731-LV  
\$248,994-IV

\$72,351-TV  
\$72,351-LV

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TOTAL VALUE-TV  
LAND VALUE-LV

**X204-NESTOR BORUNDA SURV 204 ABST 6152**

**X210**

X204-999-0000-0100 34 M-1 Z9-U S A EXEMPT -G GOVT ENTITY  
 UNITED STATES GOVERNMENT R-RESIDENTIAL  
 NESTOR BORUNDA SURV 204 ABS 6152  
 TR 1 (1.050 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X210-999  
C

X204-999-0000-0300 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 R G E P & S F RAILROAD CO REF-REFERENCE ACCT ONLY  
 310 SANTA FE BLDG  
 AMARILLO TX 79110-6646  
 RAILROAD  
 NESTOR BORUNDA SURV 204 ABS 6152  
 TR 2 (0.469 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X210-999  
S

\*7304

X204-999-0000-0500 34 M-1 Z7-PEOPLE OF STATE OF TX ROAD TY-NEIGHBORHOOD  
 PEOPLE OF THE STATE OF TEXAS C-COMMERCIAL EXEMPT -G GOVT ENTITY  
 NESTOR BORUNDA SURV 204 ABS 6152 LAND AREA- .413AC  
 TR 3 (0.413 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X210-999  
H

X204-999-0000-0700 34 M-1 F1-COMM OTHR THAN F2-F9 BASEMNT-UNFINISHED BSMT 10/76 \$40,713-TV  
 SMITH REX B C-COMMERCIAL TOPO -LEVEL 729-1204 \$35,022-LV  
 3350 DONIPHAN DR LAND AREA- 6,832SF ROAD TY-NEIGHBORHOOD \$5,691-IV  
 EL PASO TX 79922-1640 LAND AREA- 13,400AC UTILITY-ELEC GAS WATER  
 \*3350-REAR DONIPHAN DR MAIN BLDG- 6,832SF  
 NESTOR BORUNDA SURV 204 ABS 6152 ADJ BLDG- 6,832SF  
 TR 4 (10.712 ACRES) & TR 6 (2.689 YRD PAV CONC 1,120SF  
 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X210-999  
C

X204-999-0000-0900 34 M-1 J3-UTILS/ELECTRIC CO ROAD TY-NEIGHBORHOOD \$2,178-TV  
 EL PASO ELECTRIC CO C-COMMERCIAL \$2,178-LV  
 303 N OREGON ST LAND AREA- 1.000AC  
 EL PASO TX 79901-1329  
 NESTOR BORUNDA SURV 204 ABS 6152  
 TR 5 (0.997 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

**G14**

EL PASO

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PARCEL NUMBER	DIST ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE TOTAL VALUE-TV
OWNERS NAME		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE LAND VALUE-LV
MAILING ADDRESS		PROPERTY TYPE			D -S -F CDS IMPRV VALUE-IV
*PROPERTY LOCATION		LAND AREA			BOOK-PAGE BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS	EXTRA FEATURES			AGRIC VALUE-AV

X204-999-0000-1100 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 NESTOR BORUNDA SURV 204 ABS 6152  
 TR 6 (2.689 ACRES) CARRIED WITH 4  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

**X209-F M COLLINS SURV 209 ABST 2260**

**X210**

X210-999  
9

X210-999  
9

TOTAL VALUE-TV  
LAND VALUE-LV  
PRV VALUE-IV  
LDG VALUE-BV  
AGRIC VALUE-AV

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

### X045-GUADALUPE LUCERO SURV 45

X045-999-0000-3500			B2-RES MULTI FAMILY APTS	EXT FIN-BRICK	CARD NO- 12	*CONTINUED*	\$1,653,252-TV
LULAC HOMES TRUST			PFCL-182 STRY DET MASONRY	BASEMNT-UNFINISHED BSMT	YR BLT -1964		\$365,141-LV
*6301 DELTA DR			C-COMMERCIAL				\$12,729-BV
			LAND AREA- 840SF				
			LAND AREA- 4.790AC				
			MAIN BLDG- 840SF				
			ADJ BLDG- 840SF				

			B2-RES MULTI FAMILY APTS	EXT FIN-BRICK	CARD NO- 13		\$10,755-BV
			IKDL-SMALL SHOP FRAME	BASEMNT-UNFINISHED BSMT	YR BLT -1964		
			C-COMMERCIAL				
			LAND AREA- 1,200SF				
			LAND AREA- 4.790AC				
			MAIN BLDG- 1,200SF				
			ADJ BLDG- 1,200SF				

### X054-HARRISON SURV 54 ABST 2804

X054-999-000A-0100	34	M-3	C2-COMMERCIAL VACANT LOT ROAD	TY-NEIGHBORHOOD			\$147,825-TV
A S A R C O INC			C-COMMERCIAL				\$147,825-LV
C/O PO BOX 26903			LAND AREA- 8.484AC				
EL PASO TX 79926-6903							
HARRISON SURV 54 ABST 2804 (8.484 ACRES)							

IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X054-999-000A-5000	34	M-3	C2-COMMERCIAL VACANT LOT ROAD	TY-INDUSTRIAL SITE		07/26/88	\$36,577-TV
ASARCO INC			C-COMMERCIAL			W -D -	\$36,577-LV
PO BOX 1111			LAND AREA- .839AC			1949-1484	
EL PASO TX 79999-1111							
HARRISON SURV 54 ABST 2804 (0.8397 AC)							

IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

### X054-HARRISON SURV 54 ABST 2804

X054-999-000D-0100	34		E7 COMMERCIAL WAREHOUSE	EXT FIN-METAL SIDING	YR BLT -1986	12/82	\$51,831-TV
TAYLOR HENRY L			ISDA-SIG WHS FRAME	RF TYPE-GABLE		1313-0795	\$22,226-LV
PO BOX 220462			C-COMMERCIAL	RF MAT -METAL		PRIOR:	\$29,605-IV
EL PASO TX 79913-2462			LAND AREA- 1,710SF	HEATING-NO HEAT		01/04/81	
*2650 W PAISANO DR			LAND AREA- 2.041AC	COOLING-NO COOLING		1138-1329	
HARRISON SURV 54 ABST 2804 (2.0410 AC) (2.0410 AC)			MAIN BLDG- 1,710SF	INT FIN-UNFINISHED			

TOTAL VALUE-TV  
LAND VALUE-LV  
PRV VALUE-IV  
LDG VALUE-BV  
AGRIC VALUE-AV

\$42,864-TV  
\$42,864-LV

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EL PASO (CAD), TX.

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VAL VALUE-TV  
440 VALUE-LV  
PRV VALUE-IV  
DGS VALUE-BV  
VIC VALUE-AV

\$42,864-TV  
\$42,864-LV

\$121,704-TV  
\$121,704-LV

\$85,580-TV  
\$85,580-LV

\$8,187-TV  
\$8,187-LV

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	DATE	LAND VALUE-LV
*PROPERTY LOCATION			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
MAILING ADDRESS			LAND AREA	EXTRA FEATURES		BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS						AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

X054-999-000D-0100	34		F7-COMMERCIAL WAREHSES	EXT FIN-METAL SIDING	YR BLT -1986	12/82	\$51,831-TV
TAYLOR HENRY L			ISDA-STG WHS FRAME	RF TYPE-GABLE		1313-0795	\$22,226-LV
PO BOX 220462			C-COMMERCIAL	RF MAT -METAL		PRIOR:	\$29,605-IV
EL PASO TX 79913-2462			LAND AREA- 1,710SF	HEATING-NO HEAT		01/04/81	
*2650 W PAISANO DR			LAND AREA- 2.041AC	COOLING-NO COOLING		1138-1329	
HARRISON SURV 54 ABST 2804			MAIN BLDG- 1,710SF	INT FIN-UNFINISHED			
(2.0410 AC) (2.0410 AC)			ADJ BLDG- 1,710SF	FLOOR -UNFINISHED			
IEP-EL PASCO I.S.D.			DOCK CANOPY OPN 240SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO			LOAD DOCK DIRT 840SF	TOPO -LEVEL			
SCC-EL PASO COMM COLLEGE			OFFICE AREA MTL 450SF				
SHO-THOMASON GEN HOSP			HALF BATH 2UN				
			YRD PAV CONC 576SF				
			SEC FENC BARBED 6,160SF				
			SVC CANOP UNFIN 576SF				
			ADJUSTED VALUE 1UN				

X054-999-000D-0200	34	M-3	C2-COMMERCIAL VACANT LOT	TOPO -LEVEL		02/23/90	\$13,808-TV
ASARCO INC			C-COMMERCIAL	ROAD TV-INDUSTRIAL SITE		W - -	\$13,808-LV
5032 COUNTRY CLUB PL			LAND AREA- 1.268AC	UTILITY-ELEC GAS WATER		2153-0602	
EL PASO TX 79922-2014							
HARRISON SURV 54 ABST 2804							
(1.2680 AC) (1.2680 AC)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X054-999-000D-0300	34	M-3	F7-COMMERCIAL WAREHSES	EXT FIN-CORR SIDING	YR BLT -1960	02/01/90	\$64,861-TV
ASARCO INC			C-COMMERCIAL	RF MAT -METAL		W - -	\$11,587-LV
PO BOX 1111			LAND AREA- 2,100SF	HT/AC -ROOM UNITS		2209-1691	\$53,274-IV
EL PASO TX 79999-1111			LAND AREA- 1.064AC	INT FIN-UNFINISHED		PRIOR:	
*2700 PAISANO DR			MAIN BLDG- 2,100SF	FLOOR -UNFINISHED		04/11/85	
HARRISON SURV 54 ABST 2804 (1.064			ADJ BLDG- 2,100SF	FLOOR -COMPOSITN TILE		1581-0907	
ACRES)			SVC CNPY EXP SO 1,700SF	BASEMNT-UNFINISHED BSMT			
IEP-EL PASCO I.S.D.			SEC FENC CYCLN 6,440SF	ROAD TV-INTERSTATE HWY			
CEP-CITY OF EL PASO			ADJUSTED VALUE 1UN				
SCC-EL PASO COMM COLLEGE			ADJUSTED VALUE 1UN				
SHO-THOMASON GEN HOSP							

X054-999-000D-1000	34	M-3	Z1-ALL ENTITIES	ROAD TV-MAJOR STRIP		01/77	
CITY OF EL PASO			C-COMMERCIAL	EXEMPT -G GOVT ENTITY		835-1061	
2 CIVIC CENTER PLZ			LAND AREA- 1.451AC				
EL PASO TX 79901-1124							
HARRISON SURV 54 ABST 2804 1.451							
ACRES							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

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VAL VALUE-TV  
VAL VALUE-LV

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME							

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE LAND AREA EXTRA FEATURES	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE D -S -F CDS BOOK-PAGE	TOTAL VALUE-TV LAND VALUE-LV IMPRV VALUE-IV BLDG VALUE-BV AGRIC VALUE-AV
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X054-HARRISON SURV 54 ABST 2804

X054-999-000E-0200	34	M-3	J3-UTILS/ELECTRIC CO I-INDUSTRIAL LAND AREA- 8.290AC	ROAD TV-NEIGHBORHOOD			\$18,055-TV \$18,055-LV
EL PASO ELECTRIC CO 303 N OREGON ST EL PASO TX 79901-1329 HARRISON SURV 54 ABST 2804 (8.29 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X054-999-000E-0300	34		Y9-REFERENCE REF-REFERENCE ACCT ONLY	EXEMPT -R	REFER ACCT		
E P & S W RAILROAD CO SOUTHERN PACIFIC BLDG EL PASO TX 79901-6600 HARRISON SURV 54 ABST 2804 (2.502 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X054-999-000E-0400	34		Y9-REFERENCE REF-REFERENCE ACCT ONLY	EXEMPT -R	REFER ACCT		
T & N O RAILROAD CO PO BOX 10685 EL PASO TX 79996-6605 HARRISON SURV 54 ABST 2804 (4.26 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X054-999-000E-0500	34		Y9-REFERENCE REF-REFERENCE ACCT ONLY	EXEMPT -R	REFER ACCT		
R G E P & S F RAILROAD CO 310 SANTA FE BLDG AMARILLO TX 79110-6646 HARRISON SURV 54 ABST 2804 (13.24 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

X054-999-000E-0600	34	M-3	Z7-PEOPLE OF STATE OF TX C-COMMERCIAL LAND AREA- 6.575AC	ROAD TV-MAJOR STRIP EXEMPT -G	GOVT ENTITY		
PEOPLE OF THE STATE OF TEXAS DONIPHAN DR HARRISON SURV 54 ABST 2804 (6.575 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP							

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE LAND AREA EXTRA FEATURES	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE D -S -F CDS BOOK-PAGE	TOTAL VALUE-TV LAND VALUE-LV IMPRV VALUE-IV BLDG VALUE-BV AGRIC VALUE-AV
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X054-HARRISON SURV 54 ABST 2804

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TOTAL VALUE-TV  
LAND VALUE-LV  
IMPRV VALUE-IV  
BLDG VALUE-BV  
AGRIC VALUE-AV

\$2,976-TV  
\$2,976-LV

\$3,843-TV  
\$3,843-LV

\$1,863-TV  
\$1,863-LV

\$28,071-TV  
\$28,071-LV

1996  
Res Reserved

TOTAL VALUE-TV  
LAND VALUE-LV  
IMPRV VALUE-IV  
BLDG VALUE-BV  
AGRIC VALUE-AV

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CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

X054-999-000E-0700	34	M-3	C2-COMMERCIAL VACANT LOT ROAD TY-INDUSTRIAL SITE				\$269,723-TV
A S A R C O INC			C-COMMERCIAL				\$269,723-LV
C/O PO BOX 26903			LAND AREA- 21.180AC				
EL PASO TX 79926-6903							
HARRISON SURV 54 ABST 2804							
(21.180 ACRES)							
IEP-EL PASCO I.S.D.							
CEP-CITY OF EL PASO							
SCC-EL PASO COMM COLLEGE							
SHO-THOMASON GEN HOSP							

X054-999-000E-1501	34		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	YR BLT -1935		\$105,498-TV
SOUTHWESTERN PORTLAND CEMENT			PFCL-182 STRY DET MASONRY	RF TYPE-FLAT			\$71,626-LV
PO BOX 1547			I-INDUSTRIAL	RF MAT -TAR & GRAVEL			\$33,872-IV
ODESSA TX 79760-1547			LAND AREA- 24.046SF	HEATING-NO HEAT			
W PAISANO DR			LAND AREA- 27.405AC	COOLING-NO COOLING			
HARRISON SURV 54 ABST 2804			MAIN BLDG- 10,054SF	INT FIN-UNFINISHED			
(27.4052 AC)			ADJ BLDG- 20,108SF	FLOOR -COMPOSITN TILE			
IEP-EL PASCO I.S.D.			UNGRND STRG TNK 2,500SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO			GARAGES CONC BL 1,428SF				
SCC-EL PASO COMM COLLEGE			RAILROAD SIDING 5,500SF				
SHO-THOMASON GEN HOSP			YRD PAV BLK TOP 33,250SF				
			SEC FENC CYCLN 6,940SF				
			ANCILL BLDG CON 5,853SF				
			ANCILL BLDG CON 4,990SF				
			ANCILL BLDG CON 270SF				
			ANCILL BLDG MTL 552SF				
			ADDIT TO MAIN 3,938SF				

			F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 2		\$5,929-BV
			IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
			I-INDUSTRIAL	RF MAT -TAR & GRAVEL			
			LAND AREA- 9,369SF	HEATING-NO HEAT			
			LAND AREA- 27.405AC	COOLING-NO COOLING			
			MAIN BLDG- 9,369SF	INT FIN-UNFINISHED			
			ADJ BLDG- 9,369SF	FLOOR -COMPOSITN TILE			
				BASEMNT-UNFINISHED BSMT			

			F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 3		\$986-BV
			IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
			I-INDUSTRIAL	RF MAT -TAR & GRAVEL			
			LAND AREA- 1,559SF	HEATING-NO HEAT			
			LAND AREA- 27.405AC	COOLING-NO COOLING			
			MAIN BLDG- 1,559SF	INT FIN-UNFINISHED			
			ADJ BLDG- 1,559SF	FLOOR -COMPOSITN TILE			
				BASEMNT-UNFINISHED BSMT			

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

MAIN BLDG- 1,559SF  
ADJ BLDG- 1,559SF

INT FIN-UNFINISHED  
FLOOR -COMPOSITN TILE  
BASEMNT-UNFINISHED BSMT

EL PASO (CAD), TX.

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EL PASO

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		LAND AREA	EXTRA FEATURES		D -S -F CDS	IMPRV VALUE-TV
TAX DISTRICTS						BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

X054-999-000E-1501			F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 4	*CONTINUED*	\$105,498-TV
SOUTHWESTERN PORTLAND CEMENT			IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		\$71,626-LV
*2825			I-INDUSTRIAL	RF MAT -TAR & GRAVEL			\$5,611-BV

			LAND AREA- 8,865SF	HEATING-NO HEAT			
			LAND AREA- 27.405AC	COOLING-NO COOLING			
			MAIN BLDG- 8,865SF	INT FIN-UNFINISHED			
			ADJ BLDG- 8,865SF	FLOOR -COMPOSITN TILE			
				BASEMNT-UNFINISHED BSMT			

			F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 5		\$3,715-BV
			ISCL-STG WHS MASONRY	RF TYPE-FLAT	YR BLT -1935		
			I-INDUSTRIAL	RF MAT -TAR & GRAVEL			

			LAND AREA- 6,729SF	HEATING-NO HEAT			
			LAND AREA- 27.405AC	COOLING-NO COOLING			
			MAIN BLDG- 6,729SF	INT FIN-UNFINISHED			
			ADJ BLDG- 6,729SF	FLOOR -COMPOSITN TILE			
			LOAD DOCK CONC 550SF	BASEMNT-UNFINISHED BSMT			

X054-999-000E-1503	34	M-3	Z1-ALL ENTITIES	ROAD TY-INDUSTRIAL SITE		09/26/90	\$14,232-TV
CITY OF EL PASO			C-COMMERCIAL	EXEMPT -G GOVT ENTITY		-	\$14,232-LV
2 CIVIC CENTER PLZ			LAND AREA- .816AC			2227-1030	

EL PASO TX 79901-1124  
HARRISON SURV 54 ABST 2804  
(0.8168 AC)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

X054-999-000E-1505	34	M-3	D7-DESERT ACREAGE <5AC				\$4,971-TV
A S A R C O INC			R-RESIDENTIAL				\$4,971-LV
C/O PO BOX 26903			LAND AREA- 1.657AC				

EL PASO TX 79926-6903  
HARRISON SURV 54 ABST 2807 (1.657 ACRES)  
IEP-EL PASCO I.S.D.  
CEP-CITY OF EL PASO  
SCC-EL PASO COMM COLLEGE  
SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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EL PASO

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME	MAILING ADDRESS		PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
*PROPERTY LOCATION	LEGAL DESC		LAND AREA	EXTRA FEATURES		D -S -F CDS	IMPRV VALUE-TV
TAX DISTRICTS						BOOK-PAGE	BLDG VALUE-BV
							AGRIC VALUE-AV

1996  
Reserved

VALUE-TV  
VALUE-LV  
VALUE-TV  
VALUE-BV  
VALUE-AV

3,920-TV  
5,920-LV

3,529-TV  
7,500-LV  
5,029-IV

9,633-BV

7,563-TV  
7,000-LV  
0,563-IV

1996  
Reserved

VALUE-TV  
VALUE-LV

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

054-999-000E-1507	34	F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	YR BLT -1935	09/14/94	\$424,098-TV
GRANDE PORTLAND CEMENT CORP		IMCL-MFG MASONRY	RF TYPE-FLAT		W - -	\$48,421-LV
11783 STATE HIGHWAY 14 SOUTH		M-MANUFACTURING	HEATING-SUSP SPACE HTRS		2791-0501	\$375,677-IV
TIJERAS NM 87059		LAND AREA- 6,423SF	COOLING-EVAP COOLING		PRIOR:	
HARRISON SURV 54 ABST 2804		LAND AREA- 11.116AC	INT FIN-UNFINISHED		12/11/92	
(11.1160 AC)		MAIN BLDG- 4,783SF	FLOOR -UNFINISHED		W - -	
IEP-EL PASCO I.S.D.		ADJ BLDG- 4,783SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO		DOCK CANOPY ENC 944SF				
SCC-EL PASO COMM COLLEGE		DOCK CANOPY ENC 1,860SF				
SHO-THOMASON GEN HOSP		LOAD DOCK CONC 297SF				
		OFFICE AREA MTL 135SF				
		TRCKWLL CONC 2 1UN				
		STRG COMML GR 5,152SF				
		ANCILL BLDG CON 1,080SF				
		ANCILL BLDG WD 1,056SF				
		ADDIT TO MAIN 1,640SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 2		\$37,817-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 16,762SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 16,762SF	FLOOR -UNFINISHED			
		ADJ BLDG- 16,762SF	BASEMNT-UNFINISHED BSMT			
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 3		\$33,651-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 14,916SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 4,972SF	FLOOR -UNFINISHED			
		ADJ BLDG- 9,944SF	BASEMNT-UNFINISHED BSMT			
		ADDIT TO MAIN 4,972SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 4		\$39,870-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 18,044SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 6,000SF	FLOOR -UNFINISHED			
		ADJ BLDG- 13,600SF	BASEMNT-UNFINISHED BSMT			
		ADDIT TO MAIN 4,444SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 5		\$36,161-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 16,028SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 16,028SF	FLOOR -UNFINISHED			
		ADJ BLDG- 16,028SF	BASEMNT-UNFINISHED BSMT			

EL PASO (CAD), TX.

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PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

054-999-000E-1507	34	F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	YR BLT -1935	09/14/94	\$424,098-TV
GRANDE PORTLAND CEMENT CORP		IMCL-MFG MASONRY	RF TYPE-FLAT		W - -	\$48,421-LV
11783 STATE HIGHWAY 14 SOUTH		M-MANUFACTURING	HEATING-SUSP SPACE HTRS		2791-0501	\$375,677-IV
TIJERAS NM 87059		LAND AREA- 6,423SF	COOLING-EVAP COOLING		PRIOR:	
HARRISON SURV 54 ABST 2804		LAND AREA- 11.116AC	INT FIN-UNFINISHED		12/11/92	
(11.1160 AC)		MAIN BLDG- 4,783SF	FLOOR -UNFINISHED		W - -	
IEP-EL PASCO I.S.D.		ADJ BLDG- 4,783SF	BASEMNT-UNFINISHED BSMT			
CEP-CITY OF EL PASO		DOCK CANOPY ENC 944SF				
SCC-EL PASO COMM COLLEGE		DOCK CANOPY ENC 1,860SF				
SHO-THOMASON GEN HOSP		LOAD DOCK CONC 297SF				
		OFFICE AREA MTL 135SF				
		TRCKWLL CONC 2 1UN				
		STRG COMML GR 5,152SF				
		ANCILL BLDG CON 1,080SF				
		ANCILL BLDG WD 1,056SF				
		ADDIT TO MAIN 1,640SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 2		\$37,817-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 16,762SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 16,762SF	FLOOR -UNFINISHED			
		ADJ BLDG- 16,762SF	BASEMNT-UNFINISHED BSMT			
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 3		\$33,651-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 14,916SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 4,972SF	FLOOR -UNFINISHED			
		ADJ BLDG- 9,944SF	BASEMNT-UNFINISHED BSMT			
		ADDIT TO MAIN 4,972SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 4		\$39,870-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 18,044SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 6,000SF	FLOOR -UNFINISHED			
		ADJ BLDG- 13,600SF	BASEMNT-UNFINISHED BSMT			
		ADDIT TO MAIN 4,444SF				
		F2-INDUSTRIAL BLDGS	EXT FIN-CONCRETE BLOCK	CARD NO- 5		\$36,161-BV
		IMCL-MFG MASONRY	RF TYPE-FLAT	YR BLT -1935		
		M-MANUFACTURING	HEATING-SUSP SPACE HTRS			
		LAND AREA- 16,028SF	COOLING-EVAP COOLING			
		LAND AREA- 11.116AC	INT FIN-UNFINISHED			
		MAIN BLDG- 16,028SF	FLOOR -UNFINISHED			
		ADJ BLDG- 16,028SF	BASEMNT-UNFINISHED BSMT			

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

EL PASO (CAD), TX.

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PRICE	TOTAL VALUE-TV
DATE	LAND VALUE-LV
S - F CDS	IMPRV VALUE-IV
BOOK-PAGE	BLDG VALUE-BV
	AGRIC VALUE-AV

PARCEL NUMBER	DIST	ZONE
OWNERS NAME		
MAILING ADDRESS		
*PROPERTY LOCATION		
LEGAL DESC	TAX DISTRICTS	

LAND USE	PROPERTY CLASS
PROPERTY TYPE <td></td>	
LAND AREA <td></td>	
EXTRA FEATURES <td></td>	

BUILDING FEATURES	EXEMPTIONS

STATISTICAL DATA

SALE PRICE	TOTAL VALUE-TV
SALE DATE	LAND VALUE-LV
D - S - F CDS	IMPRV VALUE-IV
BOOK-PAGE	BLDG VALUE-BV
	AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

X054-999-000E-1800 34 M-3  
 SANCHEZ SERGIO L & PATRICI  
 28 SAN MARCOS DR  
 EL PASO TX 79922-1661  
 \*20 SAN MARCOS DR  
 HARRISON SURV 54 1.4 ACRES  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

F1-COMM OTHR THAN F2-F9  
 I-INDUSTRIAL  
 LAND AREA- 3,000SF  
 LAND AREA- 1,400AC  
 MAIN BLDG- 3,000SF  
 ADJ BLDG- 3,000SF  
 SEC FENC BARBED 4,500SF

BASEMNT-UNFINISHED BSMT  
 ROAD TY-NEIGHBORHOOD

03/27/89 \$21,406-TV  
 W - - \$15,246-LV  
 2035-0850 \$6,160-IV  
 PRIOR:  
 03/02/88  
 W - A -  
 1974-1918

\$730,900-TV  
\$271,888-LV  
\$76,606-BV

\$167,883-BV

X054-999-000E-2000 34  
 9 REFERENCE  
 HARRISON SURV 54 ABST 2804 63.057  
 ACRES N OF IS 10 CARRIED WITH 1 &  
 2 RUBIN HEIGHTS  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

Y9-REFERENCE  
 REF-REFERENCE ACCT ONLY

EXEMPT -R REFER ACCT

\$16,962-BV

X054-999-000E-3000 34 M-3  
 JOBE CONCRETE PRODUCTS INC  
 1 MCKELLIGON CANYON RD  
 EL PASO TX 79930-2634  
 \*762 EXECUTIVE CENTER  
 HARRISON SURV 54 ABST 2804 (2.066  
 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

F7-COMMERCIAL WAREHSES  
 C-COMMERCIAL  
 LAND AREA- 2.066AC

RF TYPE-FLAT  
 RF MAT -TAR & GRAVEL  
 HEATING-FORCED AIR  
 COOLING-NO COOLING  
 INT FIN-FIN, OPEN AREA  
 FLOOR -COMPOSITN TILE  
 BASEMNT-UNFINISHED BSMT  
 ROAD TY-SECONDARY STRIP

06/09/94 \$14,799-TV  
 W - - \$8,999-LV  
 2750-1673 \$5,800-IV  
 PRIOR:  
 08/16/90  
 W - -  
 2211-0229

2/04/90 \$534,709-TV  
 56-1400 \$534,709-LV  
 PRIOR:  
 2/12/90  
 47-1891

X054-999-000E-4000 34  
 ARMSTRONG C E TR  
 102 W KANSAS ST  
 EL PASO TX 79901-1408  
 HARRISON SURV 54 ABST 2804 (22.5  
 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

Y9-REFERENCE  
 REF-REFERENCE ACCT ONLY  
 LAND AREA- 22.500AC

EXEMPT -R REFER ACCT

12/75 \$101,250-TV  
 648-1929 \$101,250-LV

X054-999-000E-5000 34 M-3  
 CITY OF EL PASO  
 2 CIVIC CENTER PLZ  
 EL PASO TX 79901-1124  
 HARRISON SURV 54 ABST 2804 (0.014  
 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

Z1-ALL ENTITIES  
 C-COMMERCIAL  
 LAND AREA- .014AC

ROAD TY-INTERSTATE HWY  
 EXEMPT -G GOVT ENTITY

EL PASO (CAD), TX.

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PRICE	TOTAL VALUE-TV
DATE	LAND VALUE-LV
S - F CDS	IMPRV VALUE-IV
BOOK-PAGE	BLDG VALUE-BV
	AGRIC VALUE-AV

PARCEL NUMBER	DIST	ZONE
OWNERS NAME		
MAILING ADDRESS		
*PROPERTY LOCATION		
LEGAL DESC	TAX DISTRICTS	

LAND USE	PROPERTY CLASS
PROPERTY TYPE <td></td>	
LAND AREA <td></td>	
EXTRA FEATURES <td></td>	

BUILDING FEATURES	EXEMPTIONS

STATISTICAL DATA

SALE PRICE	TOTAL VALUE-TV
SALE DATE	LAND VALUE-LV
D - S - F CDS	IMPRV VALUE-IV
BOOK-PAGE	BLDG VALUE-BV
	AGRIC VALUE-AV

X054-HARRISON SURV 54 ABST 2804

X054-999-000E-5000

1/01/91 \$1,240,597-TV

1074  
 PRIOR:  
 09/30/91  
 2292-1865

MARK PLAZA  
 EL PASO TX 79901  
 HARRISON SURV 54 ABST 2804  
 (25.728 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

LAND AREA- 25.728AC

06/04/91 \$197,205-TV  
 2320-0136 \$197,205-LV  
 PRIOR:  
 07/16/86  
 W -AD-D  
 1695-0547

\$90,658-BV

X054-999-000E-7500 34 M-3 F7-COMMERCIAL WAREHSE  
 A S A R C O INC ISCL-STG WHS MASONRY EXT FIN-BRICK YR BLT -1940 \$85,174-TV  
 C/O PO BOX 26903 C-COMMERCIAL RF TYPE-GABLE \$23,435-LV  
 EL PASO TX 79926-6903 LAND AREA- 22,721SF HEATING-NO HEAT \$61,739-IV  
 \*2535 V F W ST LAND AREA- 2.152AC COOLING-NO COOLING  
 HARRISON SURV 54 ABST 2804 (2.152 MAIN BLDG- 22,721SF INT FIN-UNFINISHED  
 ACRES) ADJ BLDG- 22,721SF FLOOR -UNFINISHED  
 IEP-EL PASCO I.S.D. BASEMNT-PART FIN BSMT  
 CEP-CITY OF EL PASO TOPO -LEVEL  
 SCC-EL PASO COMM COLLEGE ROAD TY-INDUSTRIAL SITE  
 SHO-THOMASON GEN HOSP UTILITY-ELEC GAS WATER

\$446,862-BV

X054-999-000E-8500 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 9 REFERENCE REF-REFERENCE ACCT ONLY  
 HARRISON SURV 54 ABST 2804 7.255 ACRES CARRIED WITH WEST SIDE PARK  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

\$10,036-BV

X054-999-000E-9500 34 M-3 D7-DESERT ACREAGE <SAC  
 MBANK R-RESIDENTIAL 06/04/91 \$192,606-TV  
 MBANK PLAZA LAND AREA- 25.128AC F - - \$192,606-LV  
 EL PASO TX 79901 2320-0136  
 HARRISON SURV 54 ABST 2804 PRIOR:  
 (25.128 ACRES) 07/16/86  
 IEP-EL PASCO I.S.D. W -AD-D  
 CEP-CITY OF EL PASO 1695-0547  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

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SALE PRICE TOTAL VALUE-TV  
 SALE DATE LAND VALUE-LV  
 -S -F CDS IMPRV VALUE-IV  
 BOOK-PAGE BLDG VALUE-BV  
 AGRIC VALUE-AV

**TRW-REDI**

PARCEL NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			-S -F CDS	IMPRV VALUE-IV
*PROPERTY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

10/01/84 \$6,401-IV  
 1496-0333 \$1,610-LV  
 PRIOR: \$4,791-IV  
 08/83  
 372-0365

X064-999-0000-0100 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 E P & N E RAILROAD CO REF-REFERENCE ACCT ONLY  
 PO BOX 1319  
 HOUSTON TX 77251-1319  
 \* RAILROAD  
 PIERCE-ALLEN-SAVAGE #64 ABS 2323  
 (2.10 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

08/21/86 \$11,822-TV  
 -DD-D \$11,822-LV  
 777-1611  
 PRIOR:  
 07/23/86  
 225-1194

X064-999-0000-0500 34 PMD J3-UTILS/ELECTRIC CO ROAD TY-NEIGHBORHOOD \$84,774-TV  
 EL PASO ELECTRIC CO C-COMMERCIAL \$84,774-LV  
 303 N OREGON ST

999-0000-4600	34	M-1	F3-COMM OFFICE BUILDING PFCL-182 STRY DET MASONRY C-COMMERCIAL	EXT FIN-BRICK RF TYPE-FLAT RF MAT -COMPOS B-U REG	VR BLT -1955 VR EFF -1982	\$144,912-TV \$42,917-LV \$101,995-IV
SMITH REX D & MARY H 3350 DONIPHAN DR EL PASO TX 79922-1648 DONIPHAN DR CRECENCIO MOREGO SUR 114 AB 2679 TR 6 (3.941 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHJ-THOMASON GEN HOSP						
999-0000-5500	34	R-4	C2-COMMERCIAL VACANT LOT C-COMMERCIAL	ROAD TY-INTERSTATE HWY		03/10/88 \$71,618-TV 1901-0764 \$71,618-LV PRIOR: 07/17/86 W -AD-D 1695-0554
JOBE CONCRETE PRODUCTS INC 1 MCKELLIGON CANYON RD EL PASO TX 79930-2634 DONIPHAN DR CRECENCIO MOREGO SUR 114 AB 2679 7 (26.2976 AC) & 7-A (1.2479 AC) (27.5455 AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP						
999-0000-6400	34	R-4	J3-UTILS/ELECTRIC CO C-COMMERCIAL	ROAD TY-NEIGHBORHOOD		\$10,132-TV \$10,132-LV
EL PASO ELECTRIC CO 303 N OREGON ST EL PASO TX 79901-1329 DONIPHAN DR CRECENCIO MOREGO SUR 114 AB 2679 TR 8 (4.562 ACRES) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP						
99-0000-7300	34		C2-COMMERCIAL VACANT LOT C-COMMERCIAL	ROAD TY-INTERSTATE HWY		03/10/88 \$68,905-TV W -AB-B \$68,905-LV 1901-0764 PRIOR: 07/17/86 W -AD-D 1695-0554
JOBE CONCRETE PRODUCTS INC 1 MCKELLIGON CANYON RD EL PASO TX 79930-2634 CRECENCIO MOREGO SUR 114 AB 2679 9(15.6052AC)&10(1.3451AC)&11-B (3.0592AC)&15-A(6.493AC) IN ANDREW STOUT SURV 135(26.5023AC) IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP						

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NUMBER	DIST	ZONE	LAND USE	BUILDING FEATURES	STATISTICAL	SALE PRICE	TOTAL VALUE-TV
OWNERS NAME			PROPERTY CLASS	EXEMPTIONS	DATA	SALE DATE	LAND VALUE-LV
MAILING ADDRESS			PROPERTY TYPE			D -S -F CDS	IMPRV VALUE-IV
CITY LOCATION			LAND AREA			BOOK-PAGE	BLDG VALUE-BV
LEGAL DESC	TAX DISTRICTS		EXTRA FEATURES				AGRIC VALUE-AV

CRECENCIO MOREGO SURV 114 ABST 2679

99-0000-7400	34	R-4	Z1-ALL ENTITIES C-COMMERCIAL	ROAD TY-INTERSTATE HWY EXEMPT -G GOV'T ENTITY		06/23/78 W -DD-D 913-1212
CITY OF EL PASO 2 CIVIC CENTER PLZ EL PASO TX 79901-1124 CRECENCIO MOREGO SUR 114 AB 2679 TR 11-A .393 ACRE IEP-EL PASCO I.S.D. CEP-CITY OF EL PASO SCC-EL PASO COMM COLLEGE SHO-THOMASON GEN HOSP						

X132-999-9  
E  
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X132-999-9  
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JOSE GUADARAMA SURV 124 ABST 2652

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE LAND AREA EXTRA FEATURES	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE D -S -F CDS BOOK-PAGE	TOTAL VALUE-TV LAND VALUE-LV IMPRV VALUE-IV BLDG VALUE-BV AGRIC VALUE-AV
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X091-999-000B-8300 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 REF-REFERENCE ACCT ONLY  
 R G E P & S F RAILROAD CO  
 310 SANTA FE BUILDING  
 AMARILLO TX 79110-6646  
 GEORGE L WILSON SUR 91 ABST 2716  
 4.203 ACRES (NO TRACT NOS)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

**X106-CHRISTIAN SCHERTZ 106 ABST 2692**

X106-999-0000-3300 34 M-3 J3-UTILS/ELECTRIC CO ROAD TY-NEIGHBORHOOD \$2,570-TV  
 C-COMMERCIAL \$2,570-LV  
 EL PASO ELECTRIC CO  
 303 N OREGON ST  
 EL PASO TX 79901-1329  
 LAND AREA- 1.180AC  
 PAISANO DR  
 CHRISTIAN SCHERTZ #106 ABST 2692  
 (1.18 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X106-999-0000-6600 34 M-3 Z1-ALL ENTITIES ROAD TY-NEIGHBORHOOD  
 C-COMMERCIAL EXEMPT -G GOVT ENTITY  
 CITY OF EL PASO  
 2 CIVIC CENTER PLZ  
 EL PASO TX 79901-1124  
 LAND AREA- .981AC  
 CHRISTIAN SCHERTZ #106 ABST 2692  
 (0.981 ACRE)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

X106-999-0000-6700 34 Y9-REFERENCE EXEMPT -R REFER ACCT  
 REF-REFERENCE ACCT ONLY  
 R G E P & S F RAILROAD CO  
 310 SANTA FE BLDG  
 AMARILLO TX 79110-6646  
 CHRISTIAN SCHERTZ #106 ABST 2692  
 (14.21 ACRES)  
 IEP-EL PASCO I.S.D.  
 CEP-CITY OF EL PASO  
 SCC-EL PASO COMM COLLEGE  
 SHO-THOMASON GEN HOSP

EL PASO (CAD), TX.

**F01**

**TWR·REDI**

Nationwide 1-800-345-7334

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PARCEL NUMBER	DIST	ZONE	LAND USE PROPERTY CLASS PROPERTY TYPE LAND AREA EXTRA FEATURES	BUILDING FEATURES EXEMPTIONS	STATISTICAL DATA	SALE PRICE SALE DATE D -S -F CDS BOOK-PAGE	TOTAL VALUE-TV LAND VALUE-LV IMPRV VALUE-IV BLDG VALUE-BV AGRIC VALUE-AV
---------------	------	------	--	---------------------------------	---------------------	---	--

**X112-C A ENGELSFREUND SURV 112 ABST 2640**

X112-999-0000-5100 34 R-4 C1-RES VAC LOT/TR < 5AC  
 R-RESIDENTIAL  
 INTERNATIONAL CITY DEVELOPERS  
 1790 N LEE TREVINO DR STE 600  
 LAND AREA-  
 07/01/85 \$31,028-TV  
 W -AR-B \$31,028-LV

**TRW**

PARCEL I

\*PROPERT

**X132**

X132-99

\*4201

X132-99

X132-99

X132-99

X132-99

EL PASO

**TRW**

PARCEL N

\*PROPERT

**X132**

X132-99

**Appendix B**

Lithologic Logs of Monitoring Wells MW-1 through MW-12  
(Eder and Associates, 1990)



BORING



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85 FOREST AVENUE LOCUST VALLEY, N.Y. 11560  
2317 INTERNATIONAL LANE MADISON, WI. 53704

REPORT

SHEET 1 OF 1

DATE STARTED : 4-5-90      DATE FINISHED : 4-5-90      BORING No. MW-2  
CLIENT : REXENE      PROJECT No : 604-9

PROJECT NAME & LOCATION : PHASE 1 INVESTIGATION - SUNLAND PARK

REMARKS:

DRILLING CONTRACTOR : I.T.      LOGGED BY: K. McHALE      DRILLER : T. DAVIS

EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61 HSA
SIZE :		3" x 24"						
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

DEPTH BELOW GRADE	OVA READINGS	TYPE AND No.	SAMPLE			BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%
			DEPTH (FROM - TO)	MOISTURE CONTENT	RECOVERY			
0	O			M				RED/BROWN V.FINE SANDY SILT
			0-2	M	2.0	1-1 2-1		
				M				
5	O		2-4	M	2.0	3-4 4-4		RED/BROWN CLAY (STIFF)
				M				
10	O		4-6	M	.75	2-3 4-4		RED/BROWN V.FINE SAND W/TRACE SILT - NATURAL BLACK + IRON STAINING.
				W				
			6-8	W	2.0	8-8 8-9		
15	O		8-10	W	2.0	6-7 9-10		
20	O		13-15	W	1.5	7-8 12		EOB @ 15.0

# BORING



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85 FOREST AVENUE LOCUST VALLEY, N.Y. 11560  
2317 INTERNATIONAL LANE MADISON, WI. 53704

# REPORT

SHEET 1 OF 2

DATE STARTED : 4-9-90

DATE FINISHED : 4-9-90

BORING No. MW-3

CLIENT : REXENE

PROJECT No : 604-9

PROJECT NAME & LOCATION : PHASE 1 INVESTIGATION - SUNLAND PARK, NEW MEXICO

REMARKS:

DRILLING CONTRACTOR : I.T.

LOGGED BY: K. McHALE

DRILLER : T. DAVIS

EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61
SIZE :		3" x 24"						HSA
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

WATER LEVEL AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GRADE	OVA READINGS	SAMPLE				BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%
		TYPE AND No.	DEPTH (FROM - TO)	MOISTURE CONTENT	RECOVERY			
0	0		0-2	M	1.2	4-8 14-15	TAN V. FINE SAND	
	0		2-4	M	2.0	9-7 7-6	RED/BROWN SILTY V. FINE SAND	
5	0		4-6	W	2.0	3-6 4-5		
	0		6-8				RED/BROWN V. FINE SAND	
10	0		8-10	W	2.0	WR-WR 1-2		
15	0		13-15	W	2.0	14-23 27-26	AS ABOVE W/SOME MED TO COARSE SAND/TRACE GRAVEL.	
20	0		18-20	W	2.0	17-14 18-16		







# BORING



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85 FOREST AVENUE LOCUST VALLEY, N.Y. 11560  
2317 INTERNATIONAL LANE MADISON, W. 53704

# REPORT

SHEET 1 of 2

DATE STARTED : 4-8-90 DATE FINISHED : 4-8-90 BORING No. MW-6

CLIENT : REXENE PROJECT No : 604-9

PROJECT NAME & LOCATION : PHASE I INVESTIGATION - SUNLAND PARK, NEW MEXICO

REMARKS:

DRILLING CONTRACTOR : I.T. LOGGED BY: K. McHALE DRILLER : T. DAVIS

EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61 HSA
SIZE :		3" x 24"						
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

WATER LEVEL AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GRADE	OVA READINGS	SAMPLE				BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%
		TYPE AND No.	DEPTH (FROM - TO)	MOISTURE CONTENT	RECOVERY			
0								TAN V. FINE SILTY SAND W/DK. GREY → BLACK PETRO STAINING.
	510		0-2	M	1.2	3-10 4-15		
	518		2-4	M	2.0	8-3 5-5		
5								
	560		4-6	W	2.0	1-6 5-3		
	495		6-8	W	2.0	2-2 1-4		
10	80		8-10	W	2.0	3-2 1-1		RED/BROWN V. FINE SAND W/TRACE SILT AND GREY PETRO STAINING.
15	38		13-15	W	2.0	11-6 6-7		
20	24		18-20	W	2.0	14-18 17-20		



# BORING



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85 FOREST AVENUE LOCUST VALLEY, N.Y. 11560  
2317 INTERNATIONAL LANE MADISON, M. 53704

# REPORT

SHEET 1 OF 1

DATE STARTED : 3-30-90

DATE FINISHED : 3-30-90

BORING No. MW-7

CLIENT : REXENE

PROJECT No : 604-9

PROJECT NAME & LOCATION : PHASE 1 INVESTIGATION - SUNLAND PARK, NEW MEXICO

REMARKS:

DRILLING CONTRACTOR : I.T.

LOGGED BY: K. McHALE

DRILLER : T. DAVIS

EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61
SIZE :		3" x 24"						HSA
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

WATER LEVEL AT FT. AFTER HRS. FT. AFTER HRS.

DEPTH BELOW GRADE	OVA READINGS	SAMPLE				BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%
		TYPE AND No.	DEPTH (FROM - TO)	MOISTURE CONTENT	RECOVERY			
0							TAN V. FINE SAND (FILL)	
	341		0-2	M	1.0		BLACK STAINED CLAY ↓ STRONG ODDOR. GREY STAINY SILTY CLAY	
			2-4	M	2.0			
5				W				
	324		4-6	W	1.75		RED/BROWN SILTY BROWN CLAY W/STRONG PETRO ODDOR.	
			6-8	W	2.0			
10	212		8-10	W	2.0			
			10-12	W	2.0			
15							EOB @ 14.0'	
20								

# BORING



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85 FOREST AVENUE LOCUST VALLEY, N.Y. 11560  
2317 INTERNATIONAL LANE MADISON, WI. 53704

# REPORT

SHEET 1 OF 1

DATE STARTED : 3-28-90

DATE FINISHED : 3-28-90

BORING No. MW-8

CLIENT : REXENE

PROJECT No : 604-9

PROJECT NAME & LOCATION : PHASE I INVESTIGATION - SUNLAND PARK, NEW MEXICO

REMARKS:

DRILLING CONTRACTOR : I.T.

LOGGED BY: K. McHALE

DRILLER : T. DAVIS

EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61
SIZE :		3" x 24"						HSA
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

DEPTH BELOW GRADE	OVA READINGS	SAMPLE				BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%
		TYPE AND No.	DEPTH (FROM - TO)	MOISTURE CONTENT	RECOVERY			
0							FILL	
	70		0-2	M	1.1		Dk Brown Clay.	
			2-4	M	2.0		GREY STAINED SILTY CLAY. GAS ODOR	
5				W				
	150		4-6	W	2.0			
			6-8	W	2.0		BROWN SILTY CLAY w/GAS ODOR.	
10	250		8-10	W	2.0			
15							EOB @ 14.0'	
20								

# BORING



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2317 INTERNATIONAL LANE MADISON, W. 53704

# REPORT

SHEET 1 OF 2

DATE STARTED : 4-6-90	DATE FINISHED : 4-6-90	BORING No. MW-9
CLIENT : REXENE		PROJECT No : 604-9
PROJECT NAME & LOCATION : PHASE I INVESTIGATION - SUNLAND PARK, NEW MEXICO		
REMARKS: This boring log will be used for MW-95.		

DRILLING CONTRACTOR : I.T.		LOGGED BY: K. McHALE		DRILLER : T. DAVIS				
EQUIPMENT :	CASING :	SOIL SAMPLER :		CORE BARREL	AUGER	MON. WELL (MW)		DRILL RIG AND METHOD
		SPLIT SPOON				PIPE	CAP	
TYPE :		STD.						MOBILE B-61 HSA
SIZE :		3" x 24"						
HAMMER WT / FALL		140/30"		BIT				

SURFACE ELEVATION :

SURFACE CONDITIONS :

WATER LEVEL AT		FT. AFTER		HRS.		FT. AFTER		HRS.	
DEPTH BELOW GRADE	OVA READINGS	SAMPLE			BLOWS / 6" OR CORE TIME	STRATA DEPTH / ELEV.	DESCRIPTION AND REMARKS TRACE=0-10% LITTLE=10-20% SOME=20-30% AND=35-50%		
		TYPE AND No.	DEPTH (FROM - TO)	MOISTURE CONTENT					
0							DARK BROWN SILTY CLAY.		
	○		0-2	M	1.5	6-6 26-16			
	○		2-4	M	2.0	3-8 5-2	RED/BROWN SILTY V. FINE SAND W/GRAVEL + PEBBLES.		
5				W					
	○		4-6	W	2.0	3-3 1-3	RED/BROWN V. FINE TO FINE SAND		
	○		6-8	W	2.0	5-3 2			
10			8-10	W	2.0	8-5 5-8	RED/BROWN V. FINE TO FINE SAND		
	○								
	○		13-15	W	2.0	9-12 15	RED/BROWN V. FINE TO FINE SAND		
15									
	○		18-20	W	2.0	13-18 11-8	RED/BROWN V. FINE TO FINE SAND		
20									

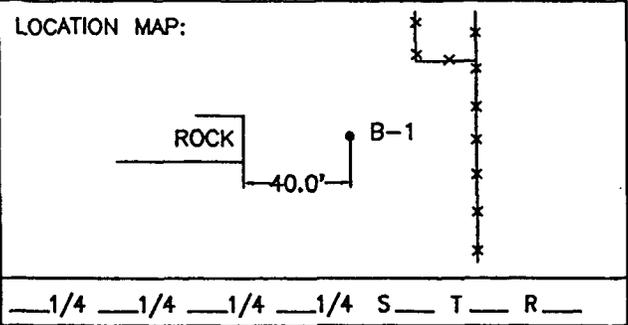




**Appendix C**

Lithologic Logs of Monitoring Wells, Boreholes, and Trenches (GCL, 1994)

# LITHOLOGIC LOG (CORE)



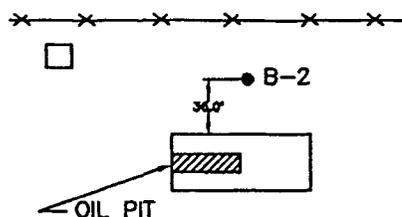
SITE ID: REXENE LOCATION ID: B-1  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM LEXAN TUBE  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: ONE FOOT AWAY FROM ATTEMPT MADE 6/16/94

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				PID READING	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC		
1		ROCK		0	2	30		SILT AND CLAY LT. BROWN, OR ANGULAR GRAVEL W/ ORGANIC MATERIAL.
2		ROCK						
3		ROCK		2	4	60		CLAY REDDISH BRN TO DK BRN. W/O LITTLE < 5% UFN GR SAND, NO STRINGERS OF SAND. MOIST CLAY.
4		ROCK						
5		ROCK		4	6	100		CLAY BROWN W/ SOME VERY SMALL SAND POCKETS, AND SOME APPARENT N.C. STAINS UFN. OR SD. (NOT CONTINUOUS LAYERS) MOIST
6		ROCK						
7		ROCK		6	8	70		CLAY DK. BROWN, INCREASING SAD, UFN GR, W/S, SUB-ANGULAR, IN POORLY DEFINED LENSES WITHIN THE CLAY, WET
8		ROCK						* SAMPLE WET BELOW ~ 6.0' FL IN WELL 3.8' BELOW SURFACE BORING TO BE PLUGGED
9		ROCK						
10		ROCK						

# LITHOLOGIC LOG

LOCATION MAP:



SITE ID: REXENE LOCATION ID: B-2  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM LEXAN TUBE  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: BORING TO BE PLUGGED

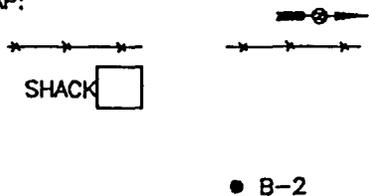
\_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				PID READING	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC		
1								GRAVEL FILL 6" SILT W/ ANGULAR FRAG OF GRAVEL LT BRN 10 YR 6/2
1			AUGER PUSH	6"	2'	60		CLAY W/ <5% FN GR SAND, BLK, HEAVY STAIN AND ODOR. N2
2								CLAY (AS ABOVE) LESS STAIN AND ODOR SLIGHTLY W/ DEPTH, NO SAND STRINGERS N2
3			AUGER PUSH	2'	4'	60		
4								SAND ( AT 4-1/2 FT.) WITH CLAY ~30% DK. BRN, (HC STAIN) FN GRAIN, W/S, SUB ROUNDED-ROUNDED, (WTR SAND) BTM OF SAND AT 5.75 (WET) SY 4/1
5			AUGER PUSH	4'	6'	100		
6								CLAY, BRN-DK BRN, < 5% SAND INC. W/ DEPTH (WET) TD LITH HOLE AT 8' 5YR 5/2
7			AUGER PUSH	6'	8'	70		
8								CLAY, 5YR 5/2, < 5% SAND, FN GR W/S, SUBANGULAR
9			AUGER PUSH	8'	10'	50		
10								FLUID LEVEL IN HOLE RECOVERED TO ~

# LITHOLOGIC LOG (CORE)

**LOCATION MAP:**



SITE ID: REXENE LOCATION ID: B-3  
 SITE COORDINATES (ft.):  
 N 289051.96163 E 1551880.27191  
 GROUND ELEVATION (ft. MSL): 3131.71  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM LEXAN TUBE  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: \_\_\_\_\_

— 1/4 — 1/4 — 1/4 — 1/4 S — T — R —

**LOCATION DESCRIPTION:** \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
1			PUSH WITH AUGER	6'	2'	40	GRAVEL, DEBRIS, FILL
2							SANDY SILT V. FN GR ≈ 10% SD DRY, LT BRN 10YR 6/2, ANGULAR, W/G, ROUNDED TO ANGULAR GRAVEL, DEC. W/ DEPTH
3							SAND, FN GRAIN— V. FN GRAIN, ≈ 15% CLAY MOIST, PALE BRN. 5YR 5/2, SUB RND, W/S, RELATIVELY CLEAN.
4							CLAY, NO GRAINS, < 5% SD, MOIST, BLACK, HEAVY STAIN, AND HEAVY ODOR, DENSE, STICKY.
5			PUSH WITH AUGER	2'	4'	40	
6							SILTY SAND, V. VN. GR, 10-20% SILT, WITH MINOR CLAY, WET, PALE BRN 5YR 5/2, SUB RND-SUB ANG., WELL SORTED, UNCONSOLID. H.C. ODOR. (SLIGHT)
7			PUSH WITH AUGER	4'	6'	100	
8							SILTY CLAY, V FN., 10% SILTY, WET PALE BROWN. 5YR 5/2, SAME HYDROC STAINING
9			PUSH WITH AUGER	6'	8'	90	
10							SILTY SAND, V FN, GRN, 20-30% SILT, W/ MINOR CLAY, WET, PALE BRN 5YR 5/2, SUB RND-SUB ANG.

TD = 8'  
WATER LEVEL RECOVERED TO ≈ 2' BELOW SURF.



LITHOLOGIC LOG (CORE)  
(Continued)

Page 2 of 2  
LOCATION ID: B-4  
(MW-14)

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
22							
24							
26							
28							
30							
32							
34							
36							
38							
40							
42							
44							
46							

SAND AS ABOVE

TD = 23'

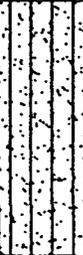
# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE SITE MAP

\_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

SITE ID: REXENE LOCATION ID: B-5  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM LEXAN TUBE  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: \_\_\_\_\_

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
1							GRAVEL, FILL AND DEBRIS
1			AUGER PUSH	6"	2'	30	SANDY SILT, V. FN FRN, < 10% SAND, WITH ≈ 10% CLAY, DRY, LT BRN, (10YR 6/2), ANGULAR, M/5, SAME SMALL GRAVEL
2							SILTY CLAY, V. FN GRN, ≈ 20-30% SILT, DRY, PALE BRN. (5YR 5/2), SUBRND. W/S, DENSE, STICKY. STAINED (HC) AT TOP OF UNIT, AND AT BASE, REL. CLEAN
3			AUGER PUSH	2'	4'	40	
4							CLAYEY SILT, V FN GRN, ≈ 50% CLAY, MOIST, DK BRN (HC STAINED), ROUNDED, W/S, STRONG HC ODOR.
5			AUGER PUSH	4'	6'	90	SILTY SAND, V FN GRN, ≈ 40% SILT. WET, GRAYISH BRN (5YR 3/2), SUB-RND TO ANG, WELL SORTED, UNCONSOL. HC ODOR.
6							SANDY SILT, V FN GRN, ≈ 30% SAND WET, PALE BRN (5YR 5/2) ANGULAR W/S, UNCONSOLID. TO REL CONSOLID, NO HC STAIN, SLIGHT HC ODOR TD = 8'
7			AUGER PUSH	6'	8'		
8							
9							
10							

# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE MAP

SITE ID: REXENE LOCATION ID: B-6  
 SITE COORDINATES (ft.):  
 N 289167.85159 E 1552005.02334  
 GROUND ELEVATION (ft. MSL): 3731.37  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/18/94 DATE COMPLETED: 6/18/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: ADJACENT TO WP # 29

\_\_\_1/4 \_\_\_1/4 \_\_\_1/4 \_\_\_1/4 S \_\_\_ T \_\_\_ R \_\_\_

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
0							GRAVEL, DEBRIS AND FILL
1				6'	2'	30	SANDY SILT, V FN GRAIN, ~ 20% SILT, DRY, LT BRN (10YR 6/2) ANGULAR, M/S, CONSOLID. ANGULAR GRAVEL, SALT.
2							SILTY CLAY, V. FN GRAIN, < 10% SILT, MOIST NEAR BOTTOM, GRAYISH BRN, (5YR 3/2) SUB-RND, W/S, HS ODOR NO SIGNIF. STAINING.
3				2'	4'	100	SILTY SAND, V. FN. GR. 20-30% SILT, WET, PALE BRN (3YR 5/2) SUB-ANG, W/S, (HC ODOR) UNCONSOLID, NO SIGNIF. STAIN.
4							
5				4'	6'	80	SILTY CLAY V FN. GR. ~ 20% SILT, WET PALE BRN (5YR 5/2) SUB-RND, W/S. SILTY SAND (AS ABOVE 3-5')
6							SILTY CLAY (AS 5-5.5')
7				6'	8'	100	SAND, FN GRAIN, < 10% SILT, WET, PALE BRN (5YR 5/2) RND, W/S, HC ODOR, NO STAIN.
8							TD = 8'
9							* LEL TO 1% DURING DRILLING FLUID LEVEL AFTER DRIL ~ 1.0' B.S.
10							



# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE MAP

SITE ID: REXENE LOCATION ID: B-8  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/18/94 DATE COMPLETED: 6/18/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: NEAR DUMPSITE

\_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				PID READING	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC		
1				6"	2'	50		GRAVEL, DEBRIS, SANDY FILL, BROWN, NO STAIN OR ODOR.
2								SANDY SILT, FINE GRAIN SD, ~ 10% SAND, DRY, YELLOW BRN, (10YR 5/4) ANGULAR, M/S, CONSOLID. W/ ANGULAR, PEBBLE GRAVEL
3				2'	4'	25		SILTY CLAY, V FN GRAN, 20-30% SILT, MINOR SAND, DRY, DUSKY YELLOWISH BRN (10YR 2/2) (HC STAINED), ANGULAR GRNS, W/S, CONSOLID, STRON HC ODOR AND STAIN.
4								SILT, V FN GRAN, (W/ INTERBEDD- 6" SILTY CLAY BEDS) WET, BLACK (HC STAIN) ANG-SUB RND, W/S, GRAINS, MOD. CONSOLID, STRONG HC ODOR AND STAIN.
5				4'	6'	80		SILTY SAND, V FN GR, 10-20% SILT. MINOR CLAY, WET, GRAYISH BRN, (5YR 3/2) RND-SUB RND, W/S, GRN, UNCONSOLID. HC STAIN AND ODOR IN UPPER UNIT, NO STAIN IN LOWER FOOT.
6								
7				6'	8'	90		WET SAND TD = 8'
8								
9								
10								

# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE MAP

— 1/4 — 1/4 — 1/4 — 1/4 S — T — R —

SITE ID: REXENE LOCATION ID: B-9  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/18/94 DATE COMPLETED: 6/18/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: HEAVY BRUSH, NO GRAVEL, LESS DEBRIS

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	SAMPLE				PID READING	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC		
1				6"	2'	30		SILTY FILL, ORGANIC MATERIAL AND DEBRIS  SANDY SILT, V. FN GR, 20% SAND, CLAY DK YELLOWISH BRN (10YR 5/4) ANGULAR, MED/SORT, CONSOLID.. NO STAIN, OR ODOR.
2								SILTY SAND, FN GRAIN, 30% SILT, DRY, GRAYISH BRN (5YR 5/2), RND-SUB RIND, W/S, MOD. CONSOLID, NO ODOR OR STAIN. WET AT BTM. OF UNIT.
3				2'	4'	30		
4								SILTY CLAY, V,V, FN GR, 30-40% SILT, WET, GRAY (N4)(HC STAIN), WELL SORT, MOD. CONSOLID., LENSES OF LIGHT GRAY CLAY.
5				4'	6'	100		
6								SILTY SAND, V. FN GR, 20% SILT, WET GRAYISH BRN (5YR 5/2) RND-SUB RND, W/S, MOD CONSOLID, NOT STAIN OR ODOR.
7				6'	8'	90		SILTY CLAY, V FN GR, 10% SILT WET, GRAYISH BRN (5YR 5/2), W/S, NO STAIN OR ODOR. SILTY INCREASE SLIGHTY W/ DEPTH. TO TD OF 12'.
8								
9				8'	10'	90		
10								

LITHOLOGIC LOG (CORE)  
(Continued)

Page 2 of 2  
LOCATION ID: B-9

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
11				10	12	90	
12							TD = 12' (SAME LITH)
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

# LITHOLOGIC LOG (CORE)

LOCATION MAP:

SITE ID: REXENE LOCATION ID: B-10  
 SITE COORDINATES (ft.):  
 N 288429.59539 E 1552201.23136  
 GROUND ELEVATION (ft. MSL): 3733.52  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/20/94 DATE COMPLETED: 6/20/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: BORING IN SAND AREA, USED TRACK HOE TO  
MOBILIZE RIG (NEAR WP 30)

1/4 1/4 1/4 1/4 S    T    R   

LOCATION DESCRIPTION: SAND DUNED W/ SOME SPARSE VEG.

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)		
			USCS	FROM	TO	% REC		PID READING	
			AUGER PUSH						
1				0	2	40			SAND, MED GR., <10% CLAY, DRY, PALE YELLOWISH BRN. (10YR 6/2), ANGULAR-SUB ANG, MED SORT, UNCONSOLID. (DUNES)
2									
3				2	4	40			SAND, MD-FN GRN, ~ 20% SILT, DRY, MOD. YELLOWISH BRN (10YR 5/4), SUB ANG-SUB RND, MOD. SORTED, UNCONSOLID.
4									SILTY CLAY, V FN GRN. 40% SILT, MOIST, PALE YELLOWISH BR. (10YR 6/2), CONSOLID. NO HC STAIN OR ODOR.
5				4	6	30			
6									SILTY CLAY, V. FN GR, <10% SILT, DRY, GRAYISH BRN (5YR 7/2), CONSOLID. NO HC ODOR, STAIN AT BASE.
7				6	8	30			
8									
9				8	10	70			SILTY SAND, V. FN GR, ~ 20% WILT, WET, BROWNISH GRAY (5YR 4/1), ANG-SUB ANG, W/S, MOD CONSOLID, STRONG HC ODOR, POSS. HC STAIN.
10									SANDY SILT. V FN GR, <10% SAD, WET PROD PRESENT CONSOLIDATED (5YR 3/2)

LITHOLOGIC LOG (CORE)  
(Continued)

Page 2 of 2  
LOCATION ID: B-10

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
11				10	12	60	
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE MAP

SITE ID: REXENE LOCATION ID: B-11  
 SITE COORDINATES (ft.):  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): \_\_\_\_\_  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/20/94 DATE COMPLETED: 6/20/94  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: \_\_\_\_\_

\_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 \_\_\_\_1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

LOCATION DESCRIPTION: SAND DUNES

DEPTH	WELL CONST.	LITH.	SAMPLE				PID READING	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC		
								NO SAMPLE, SPUD IN SAND (AS BELOW)
2				0	2	30		SAND, MED GRAIN, <5% SILT, DRY, PALE BROWN (5YR 5/2) RNDG - SUB RND, WELL SORTED, UNCOSOLIDATED, NO ODOR OR STAIN.
4				2	4	80		
6				4	6	40		SILT. V. FN GRN, <10% CLAY, MOIST, BLACK, HC STAINED, W/S, MOD. CONSOLIDATION, STR HC ODOR.
8				6	8	30		SILTY SAND, F FN GRN, 30% SILT, MINOR CLAY, WET, HEAVY HC STAIN AND ODOR (BLACK), SUB RND, W/S, MOD CONSOLIDATION.
10				8	10	90		
12				10	12	100		SAND, VN GR, <10% SILT, WET, PROD. SATURATED, DK GRAY - BLK (HC STAIN) RND - SUB RND, W/S, MOD. CONSOLID TO UNCONSOLID. (STRONG HC ODOR/FREE PRODUCT.
14								SILTY CLAY, 10% SILT, DK BRN, MOTTLED WITH HC STAINING (BLK). MOD CONSOLID. STRONG HC ODOR.
16								
18								
20								

TD = 12'



LITHOLOGIC LOG (CORE)  
(Continued)

Page 2 of 2  
LOCATION ID: B-13A

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
22							<p>SAND. FN-MED GRAIN, BLACK (HC STAINED) FREE PRODUCT PRESENT TO TD. RND-SUB-RND, W/S. UNCONSOLIDATED, "FLOWING" - NO SPOON SAMP. DESCRIPTION FROM CUTTINGS.</p> <p>TD = 32'</p> <p>* AQUIFER APPEARS TO BE UNCONFIRMED IN THIS AREA</p>
24							
26							
28							
30							
32							
34							
36							
38							
40							
42							
44							
46							

# LITHOLOGIC LOG (CORE)

LOCATION MAP: SEE MAP

SITE ID: REXENE LOCATION ID: B-14 (MW17)  
 SITE COORDINATES (ft.):  
 N 288730.82473 E 1552304.16481  
 GROUND ELEVATION (ft. MSL): 3732.04  
 STATE: NEW MEXICO COUNTY: DONA ANA  
 DRILLING METHOD: HOLLOW STEM AUGER  
 DRILLING CONTR.: GEO PROJECTS  
 DATE STARTED: 6/20/94 DATE COMPLETED: \_\_\_\_\_  
 FIELD REP.: DALE LITTLEJOHN  
 COMMENTS: \_\_\_\_\_

\_\_\_1/4 \_\_\_1/4 \_\_\_1/4 \_\_\_1/4 S \_\_\_ T \_\_\_ R \_\_\_

LOCATION DESCRIPTION: SITE LOCATED ON SAND AND GRAVEL HILL ~ 1FT. ABOVE SURROUNDING AREA

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
0				0	2'	60	
2			PUSH W/AUGER	2	4'	30	SILT, SAND, V FN GR ~ 30-40% SILT, DRY, PALE BRN (5YR 5/2), SUB ROUND, W/S, UNCONSOLID. W/SM GRAVEL.
4				4'	6	100	MISSING, BELIEVE TO BE SANDY SILT, PALE YELLOWISH BRN (10YR 6/2), CONSOLID.
6				6	8	10	SILTY CLAY, 20% SILT, V. FN GR, DRY, GRAYISH BRN, (5YR 3/2), CONSOLID, ANG. W/S CLAYEY SILT, V. FN GR, 30-40% CLAY, <5% SAND, WET, DK YELLOWISH BRN, (10YR 4.2), SUB RND, W/S, HC STAIN.
8				8	10	100	SILTY SAND, V FN GRAIN, 20% SILT, WET DK YELLOW BRN (10YR 4/2), SUB RND, W/S, NO STAINING
10				FLOWING SAND, NO CATCH SAMP.			SILTY CLAY, 40% SILTY, WET. (10YR 4/2)
12				SAMPLE DESCRIP BASED OIL SPLIT SPOON ATTEMPTS (SAND FLOWING OUT OF AUGER) AND, SOIL ON BOTTOM FLIGHT OF AUGER.			SILTY SAND, 30% SILT (DEC W/ DEPTH) WET DK YELLOWISH BRN (10YR 4/2), RND TO SUB-ROUNDED, W/S. UNCONSOLID. NO STAIN OR ODOR.
14							V FN GRAIN SAND TO 16' INCREASING TO FN GR AT TD. SILT CONTENT DEC. TO ~ 10% AT TD.
16							
18							SAND SEE NOTE.
20							

LITHOLOGIC LOG (CORE)  
(Continued)

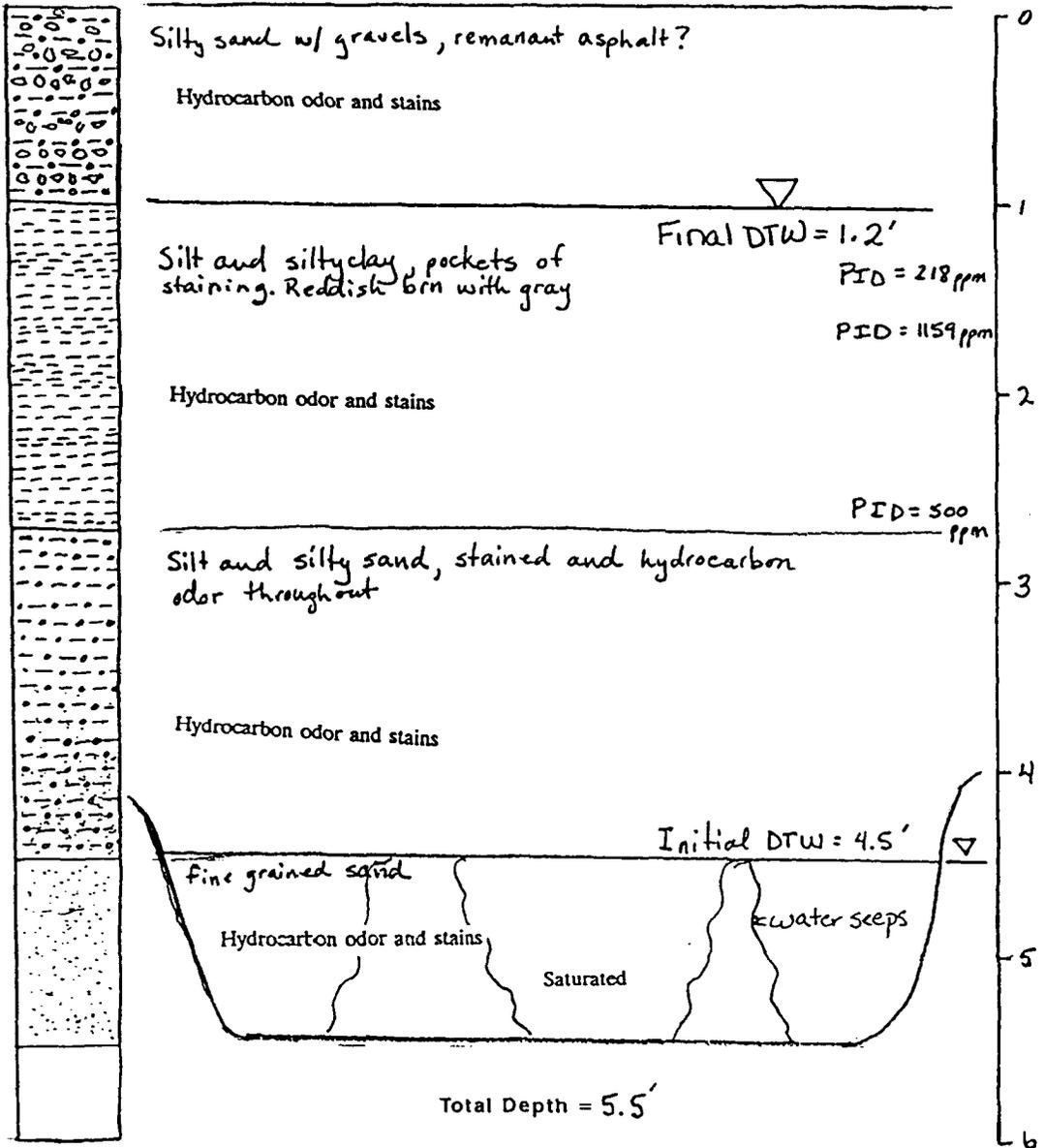
Page 2 of 2  
LOCATION ID: B-14  
(MW-17)

DEPTH	WELL CONST.	LITH.	SAMPLE				LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			USCS	FROM	TO	% REC	
22							SAND AS ABOVE.  TD = 24'
24							
26							
28							
30							
32							
34							
36							
38							
40							
42							
44							
46							

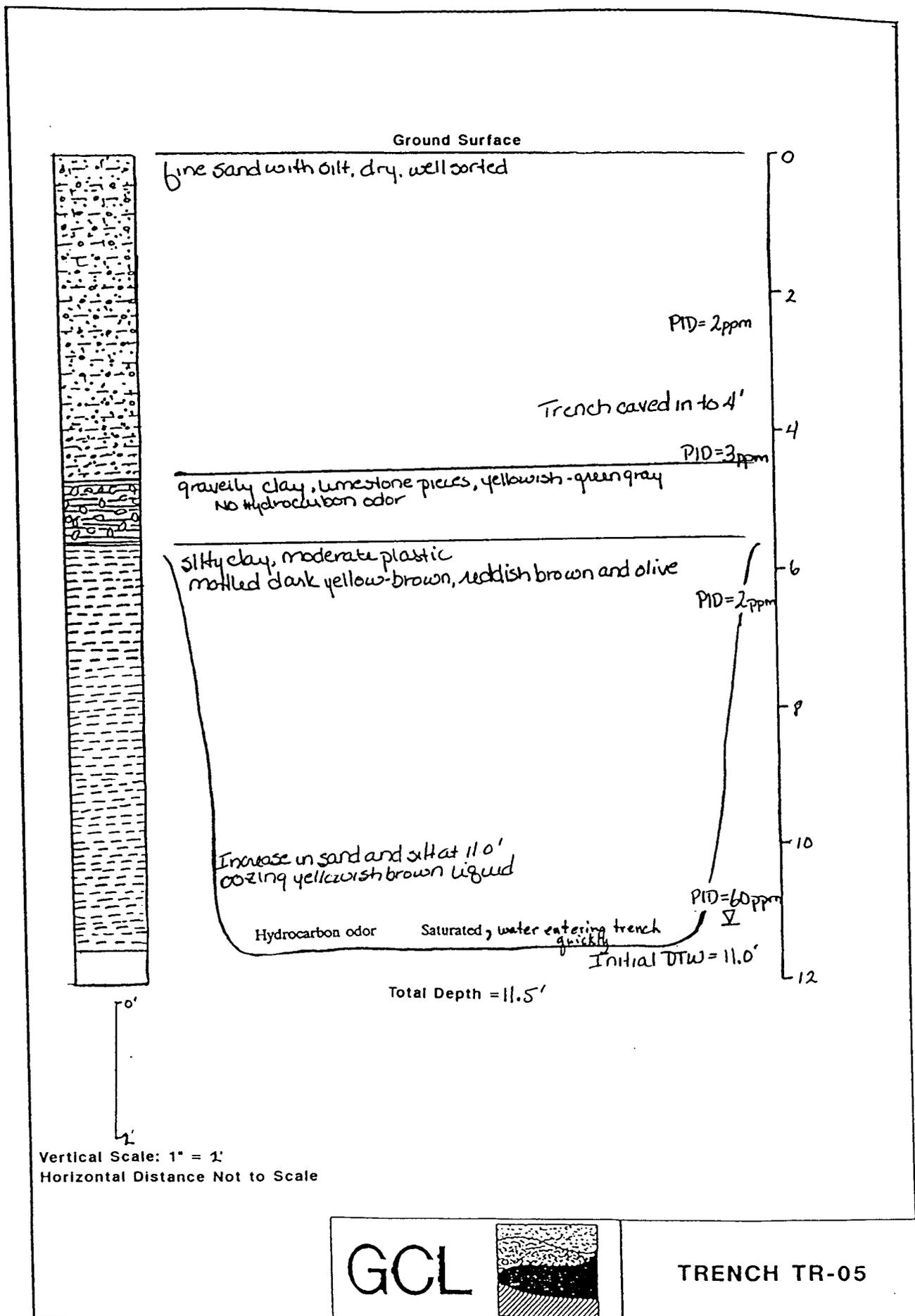
Lithology

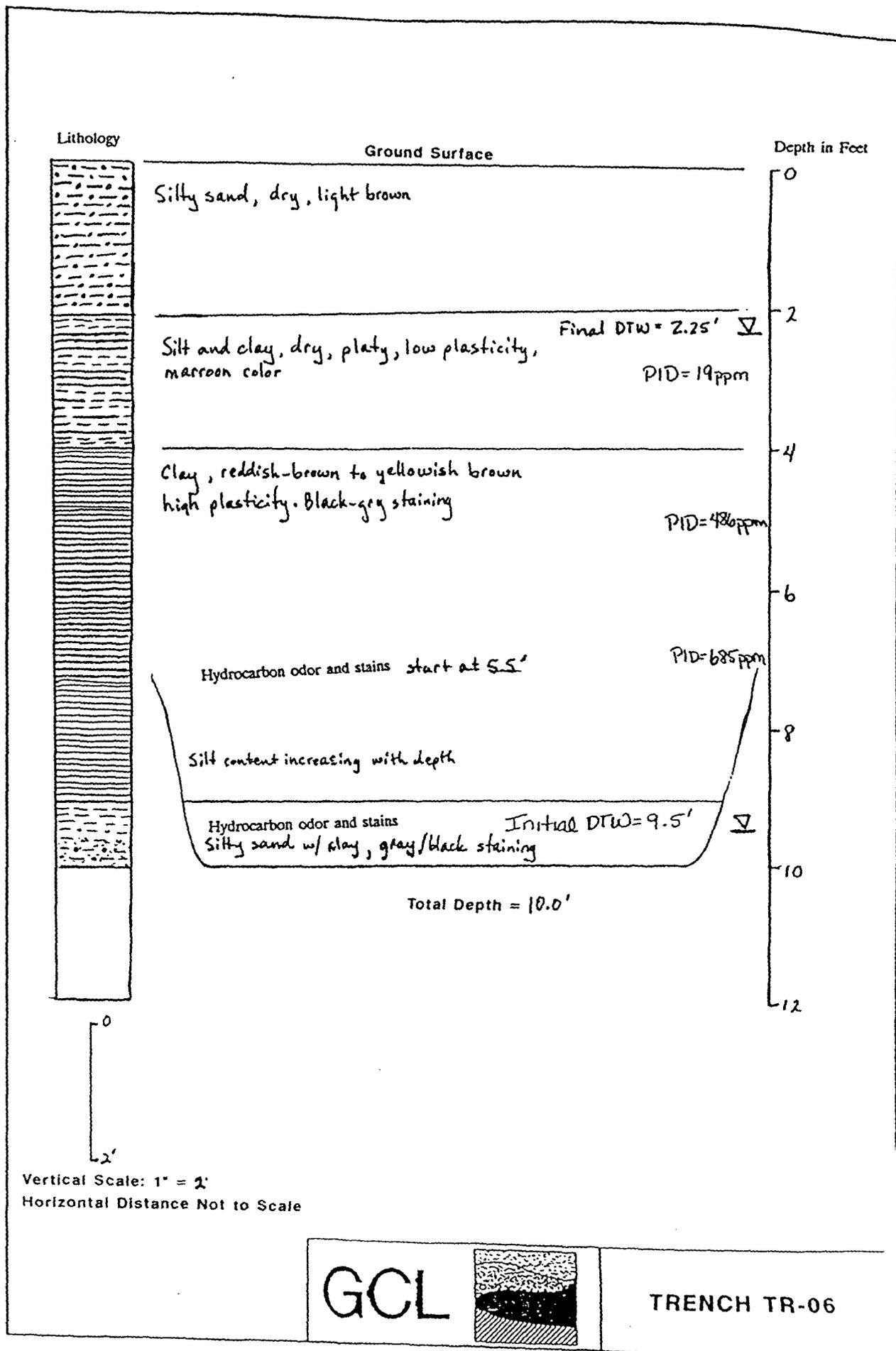
Ground Surface

Depth in Feet

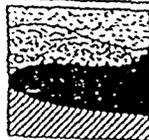


Vertical Scale: 1" = 1'  
 Horizontal Distance Not to Scale





GCL

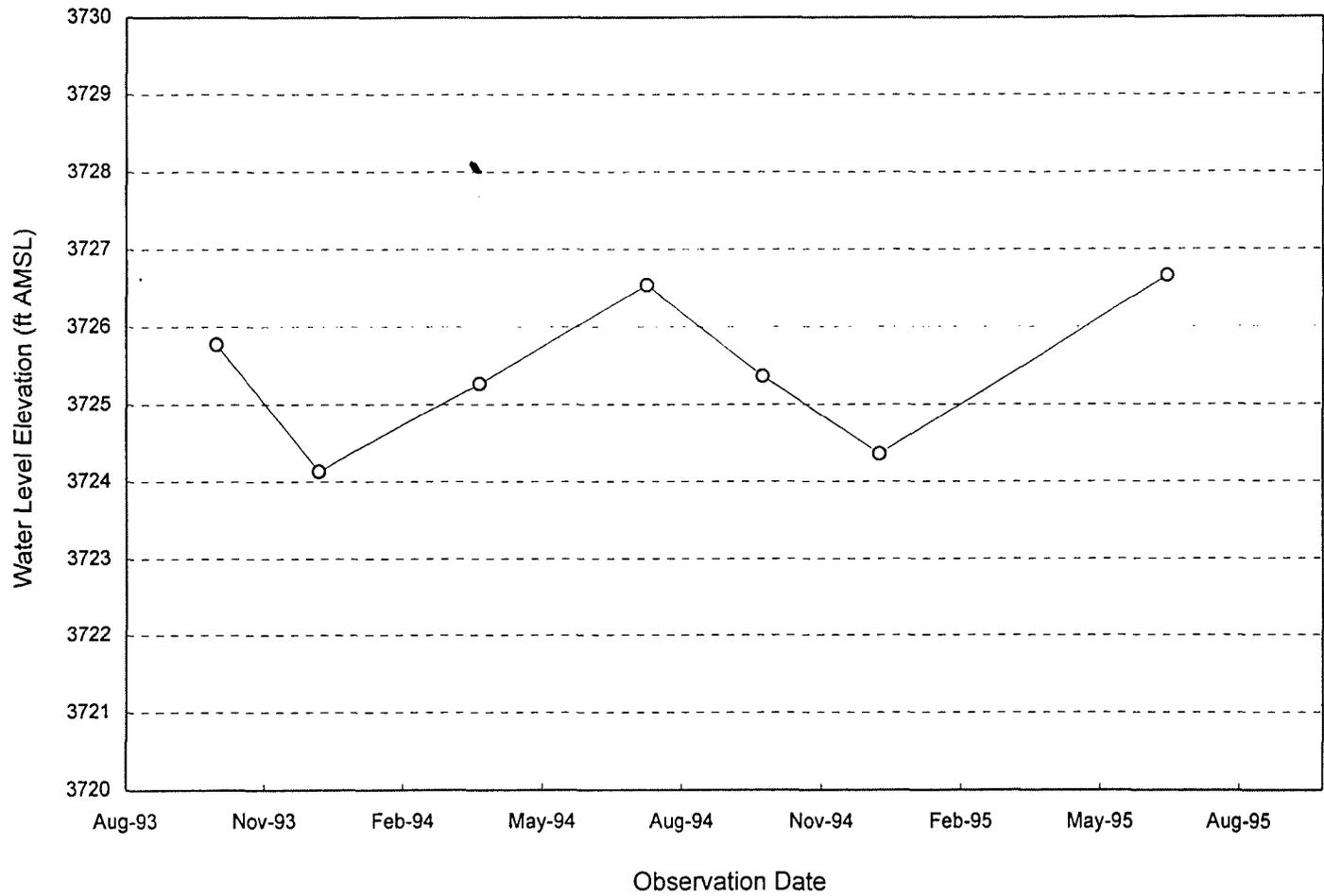


TRENCH TR-06

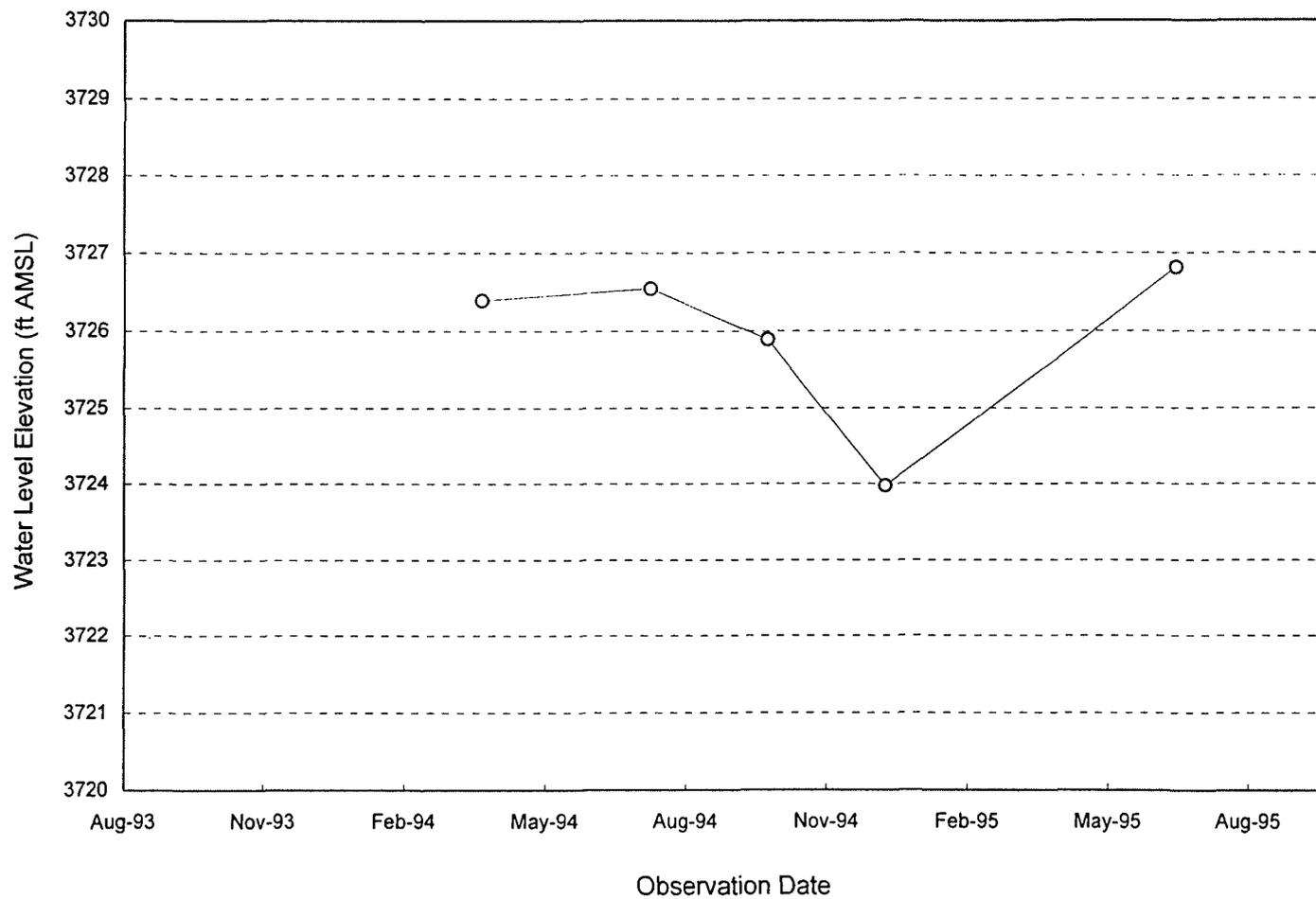
**Appendix D**

Water Levels vs. Time for Monitoring Wells MW-1 through MW-17

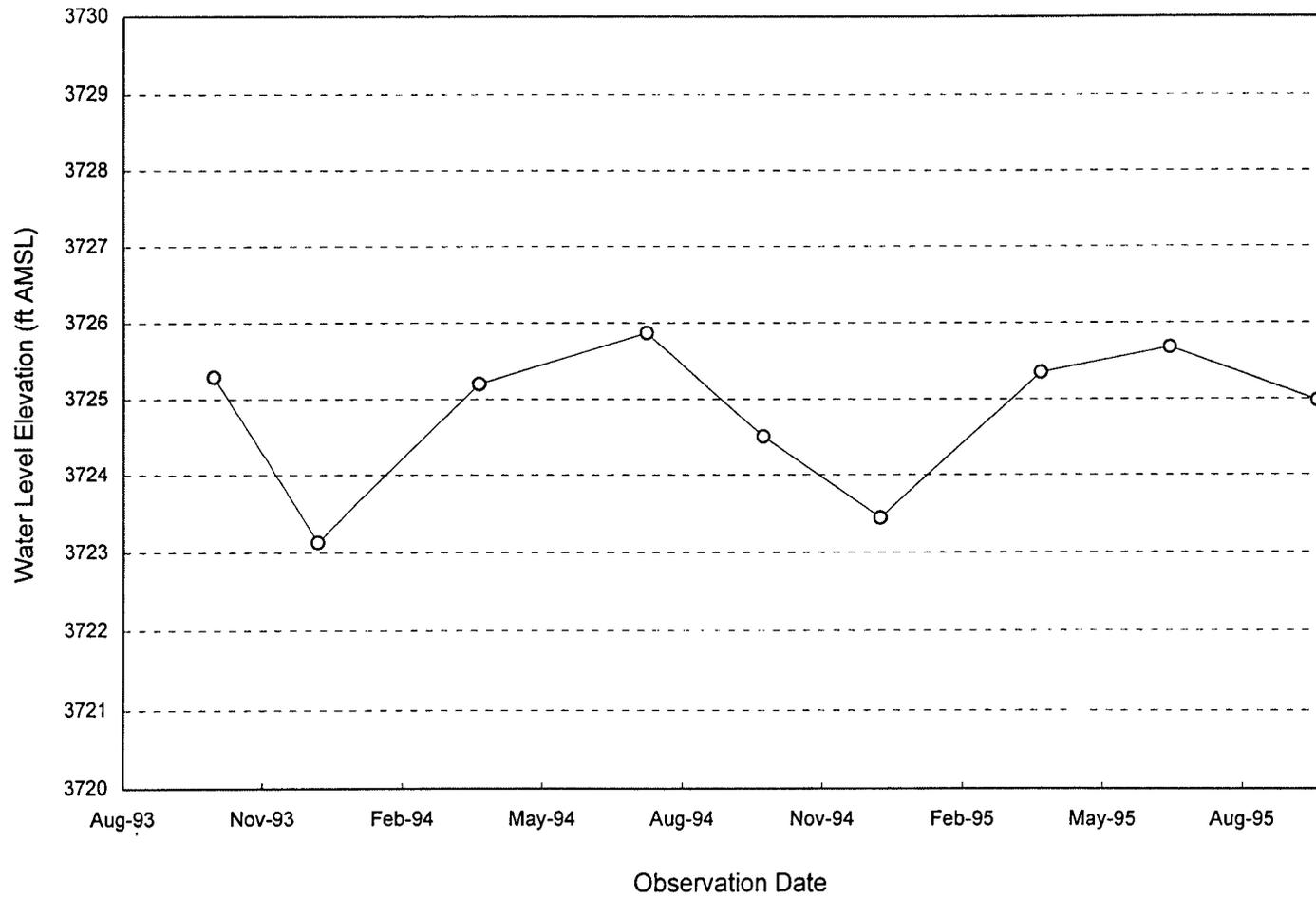
Water Level vs. Time (MW-1)



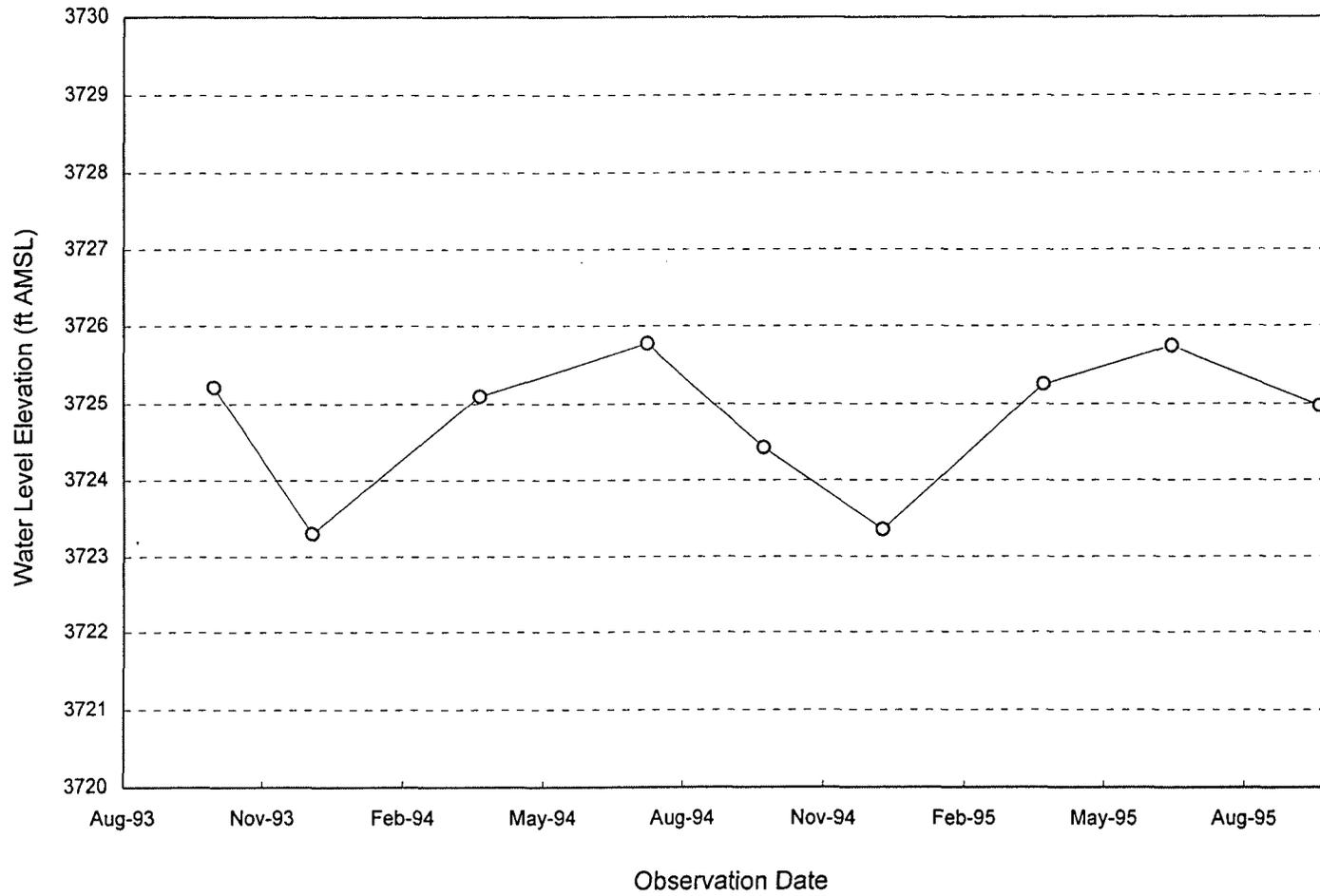
Water Level vs. Time (MW-2)



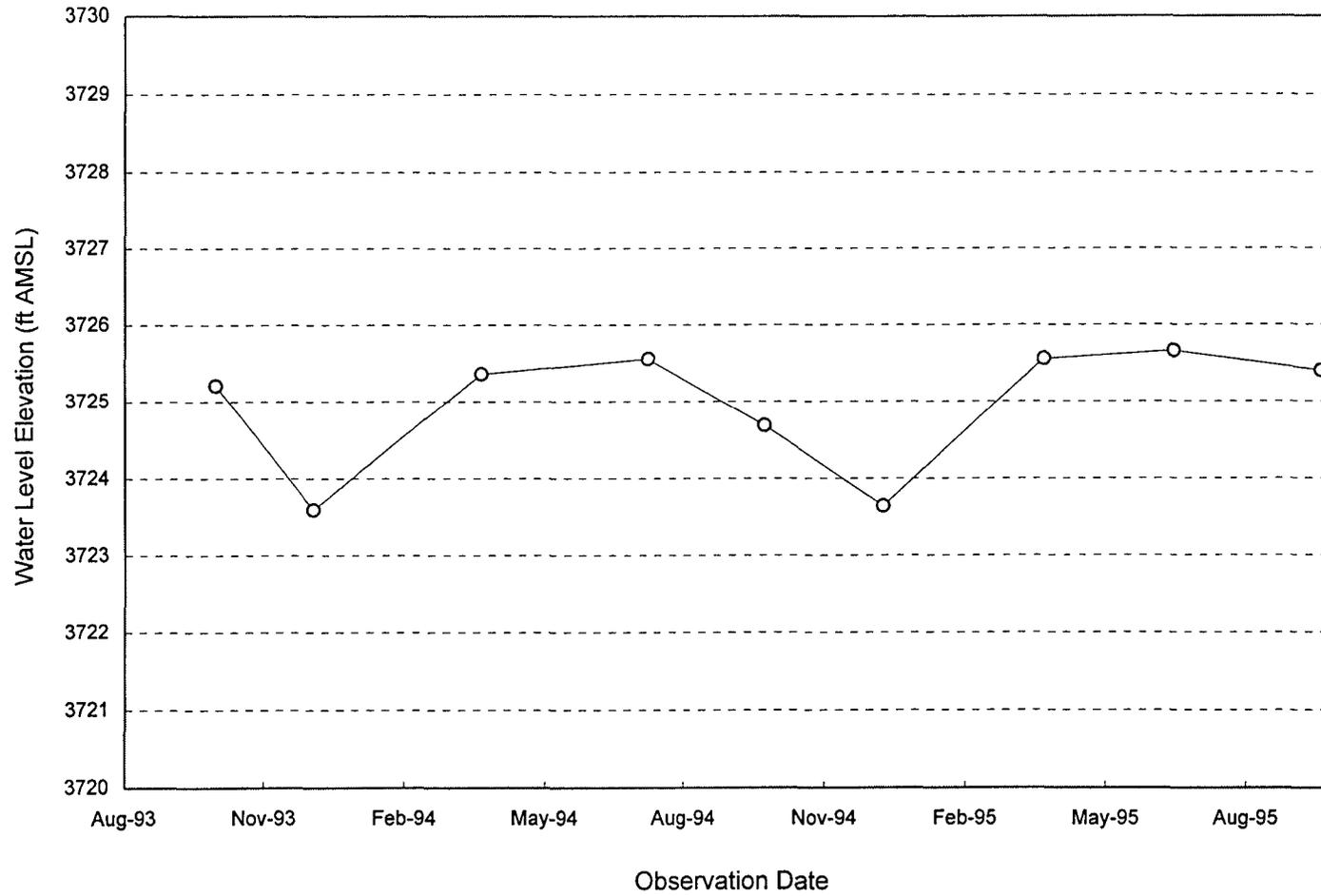
Water Level vs. Time (MW-3S)



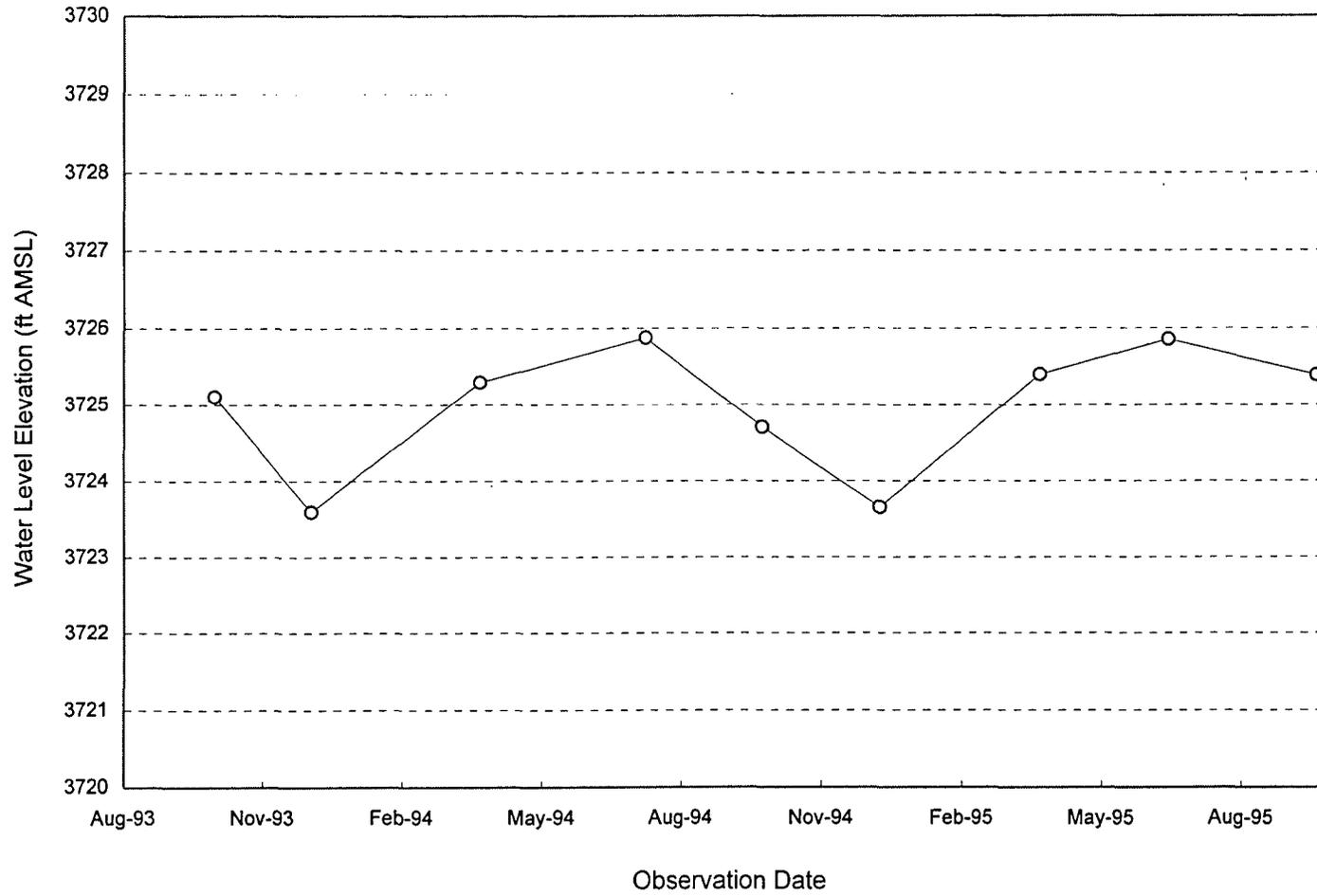
Water Level vs. Time (MW-3D)



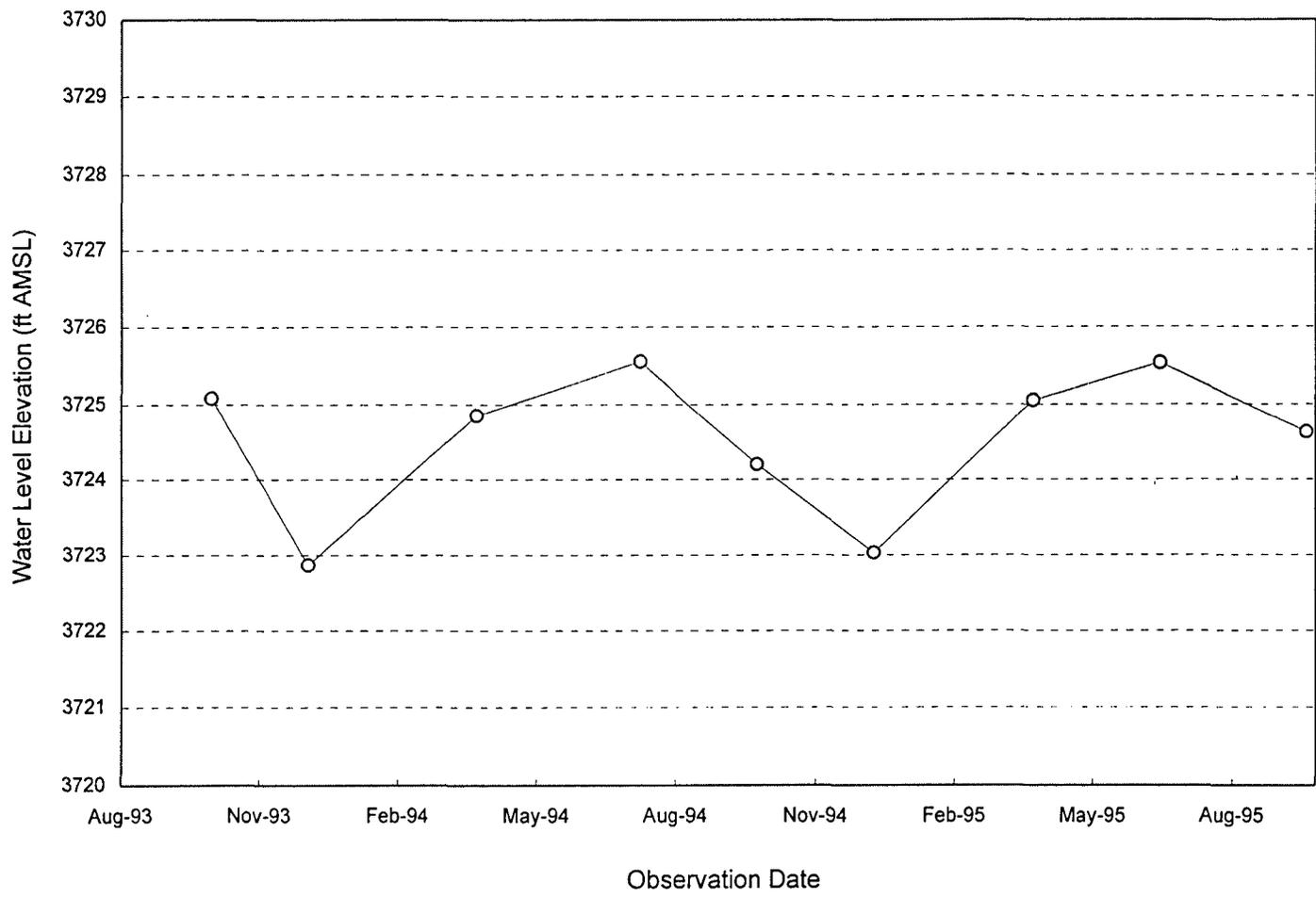
Water Level vs. Time (MW-4)



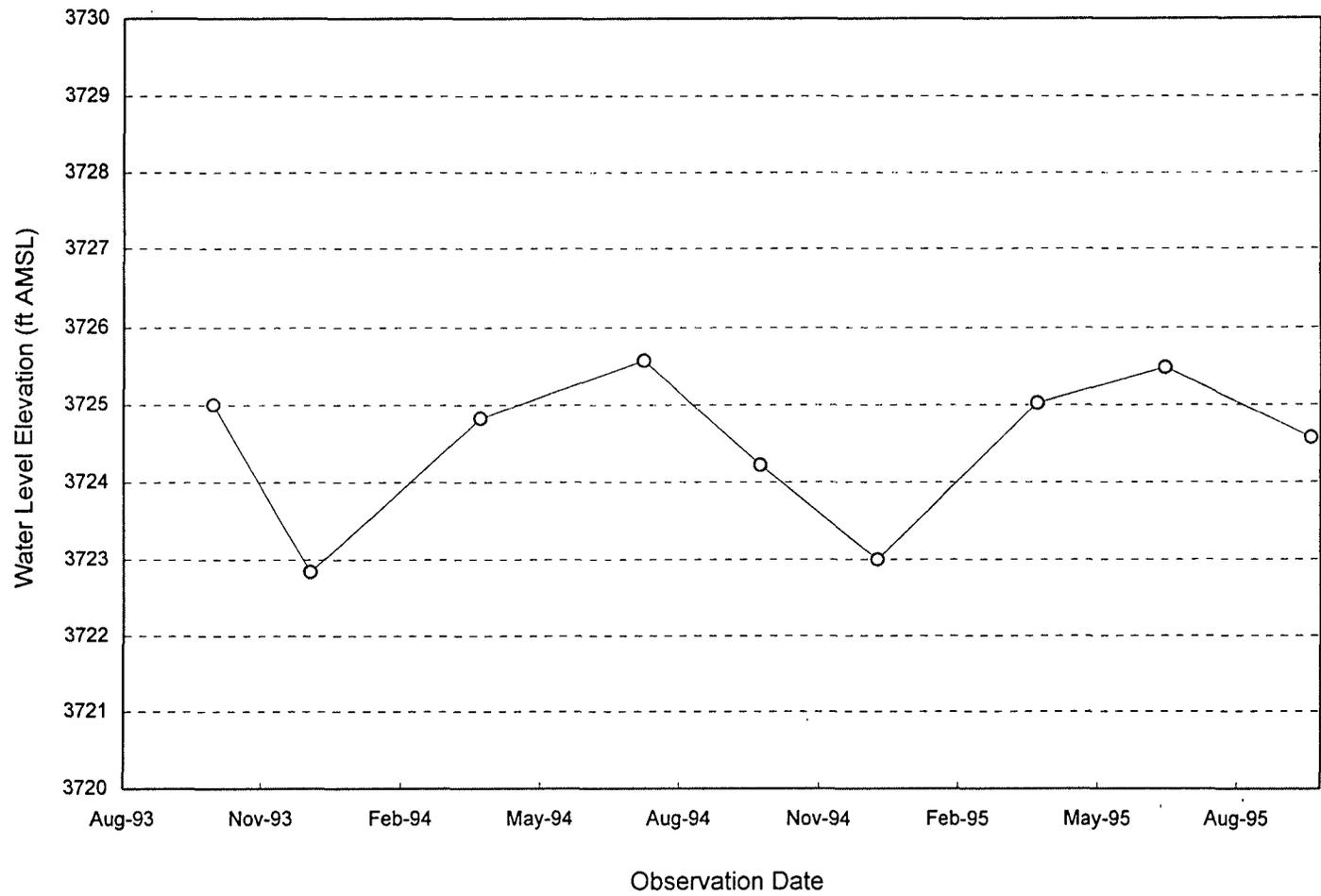
Water Level vs. Time (MW-5)



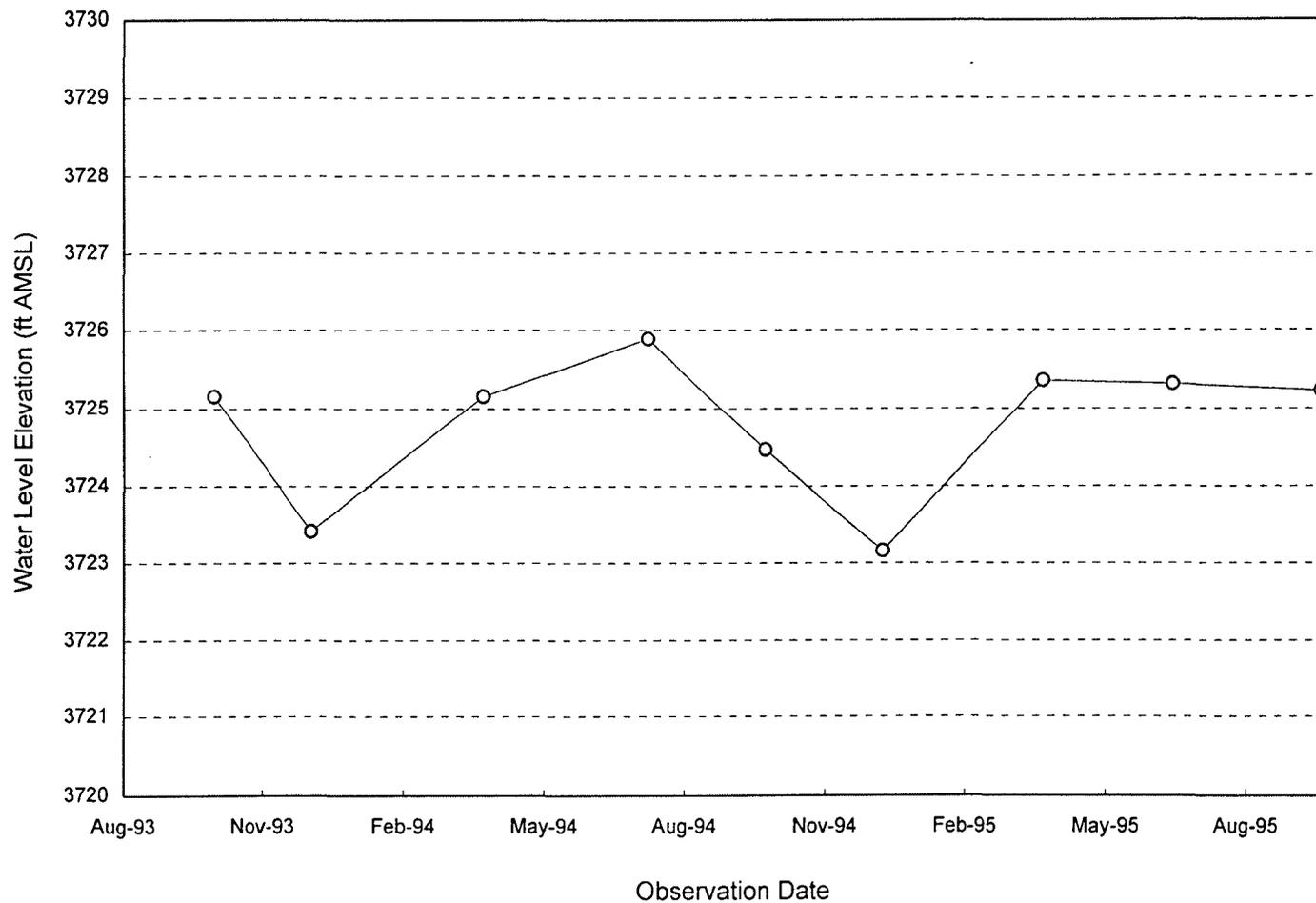
Water Level vs. Time (MW-6S)



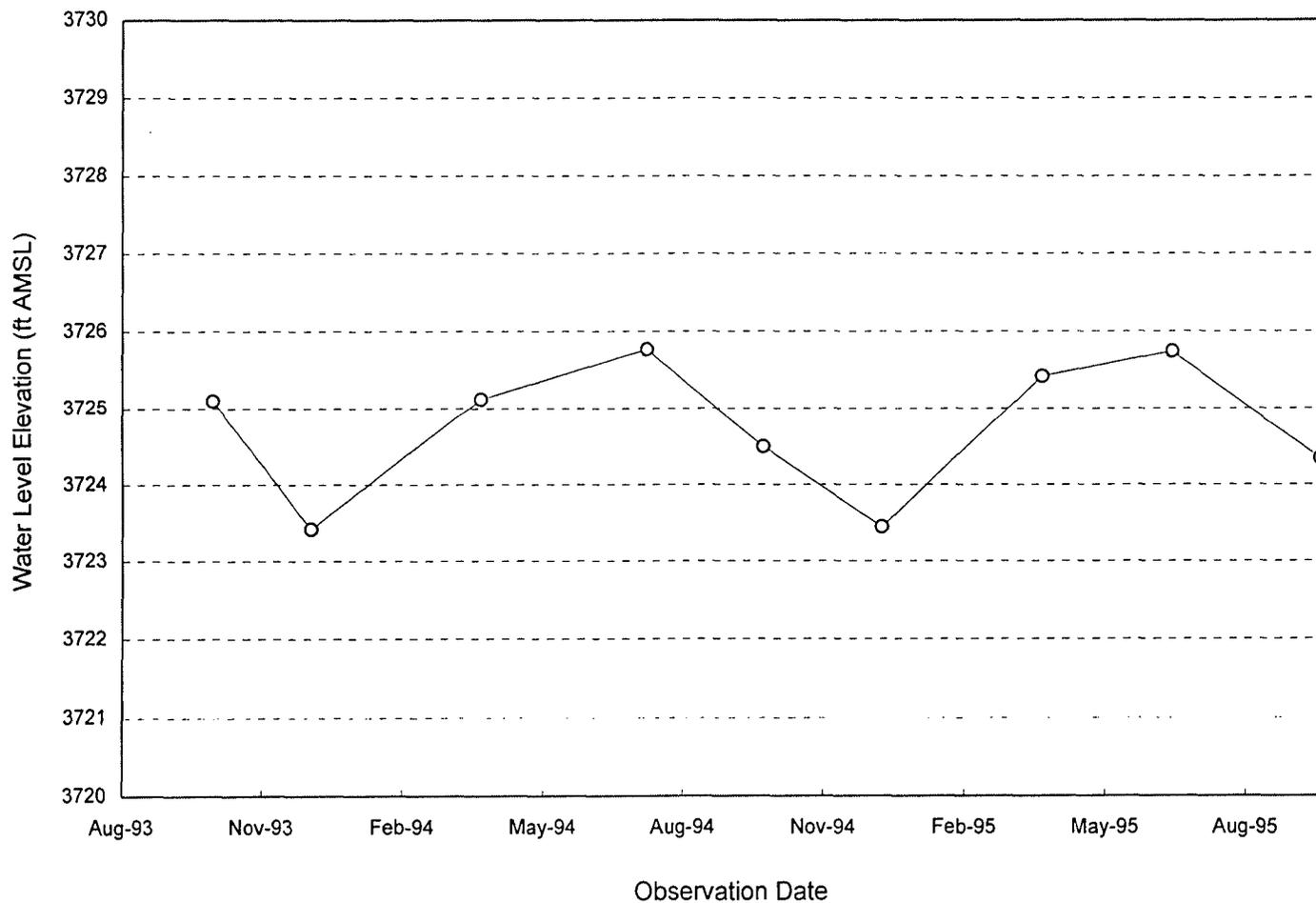
Water Level vs. Time (MW-6D)



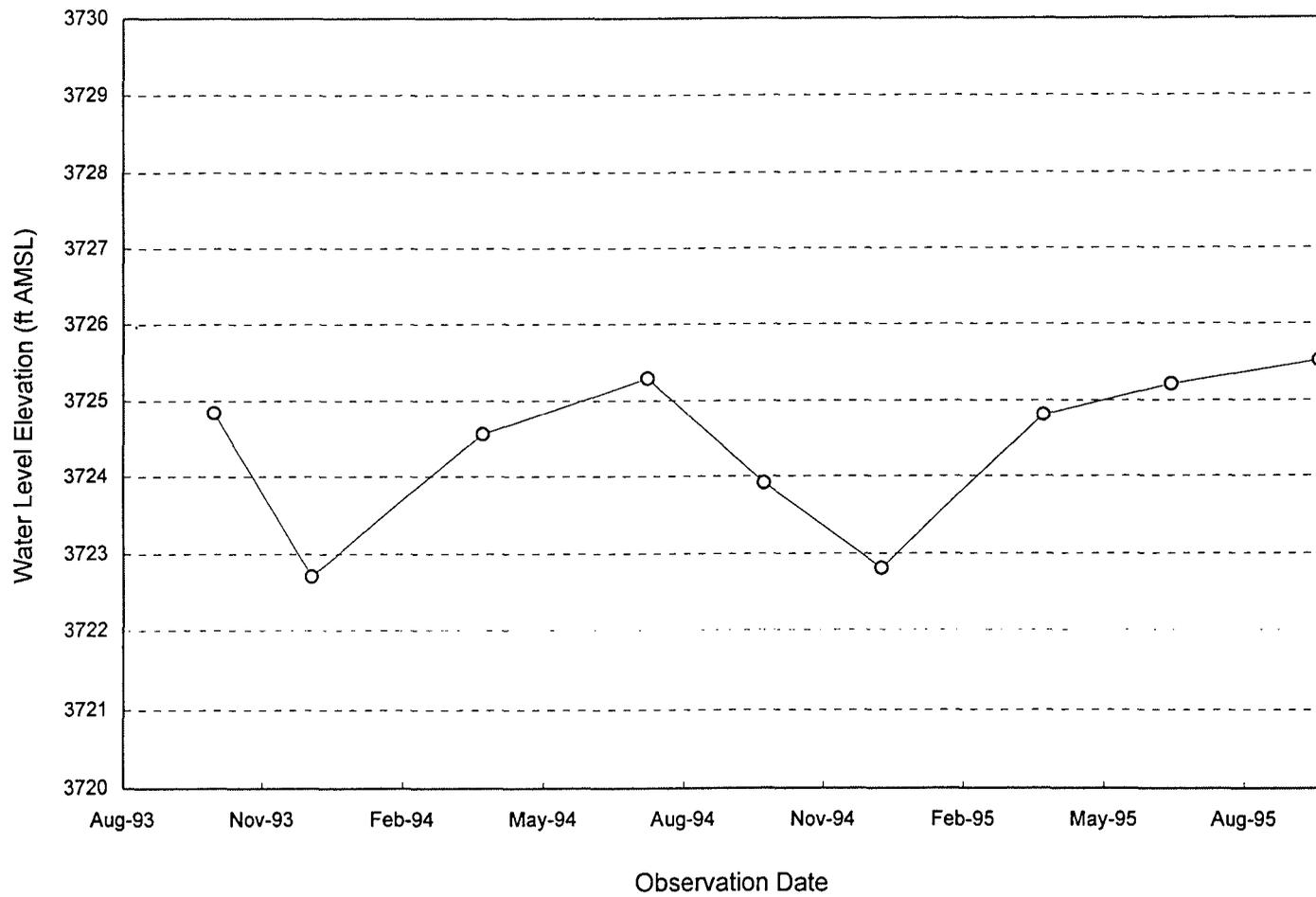
Water Level vs. Time (MW-7)



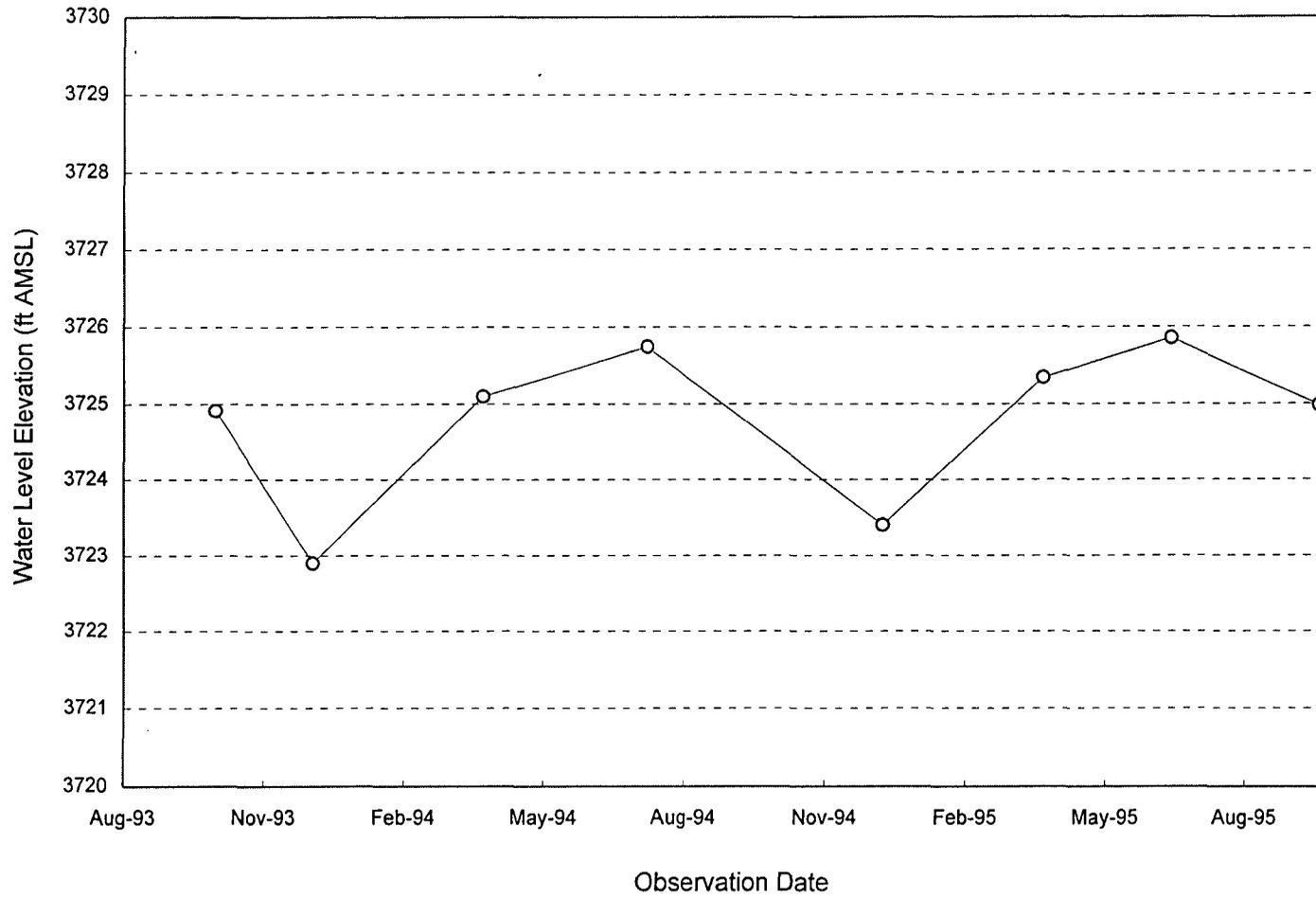
Water Level vs. Time (MW-8)



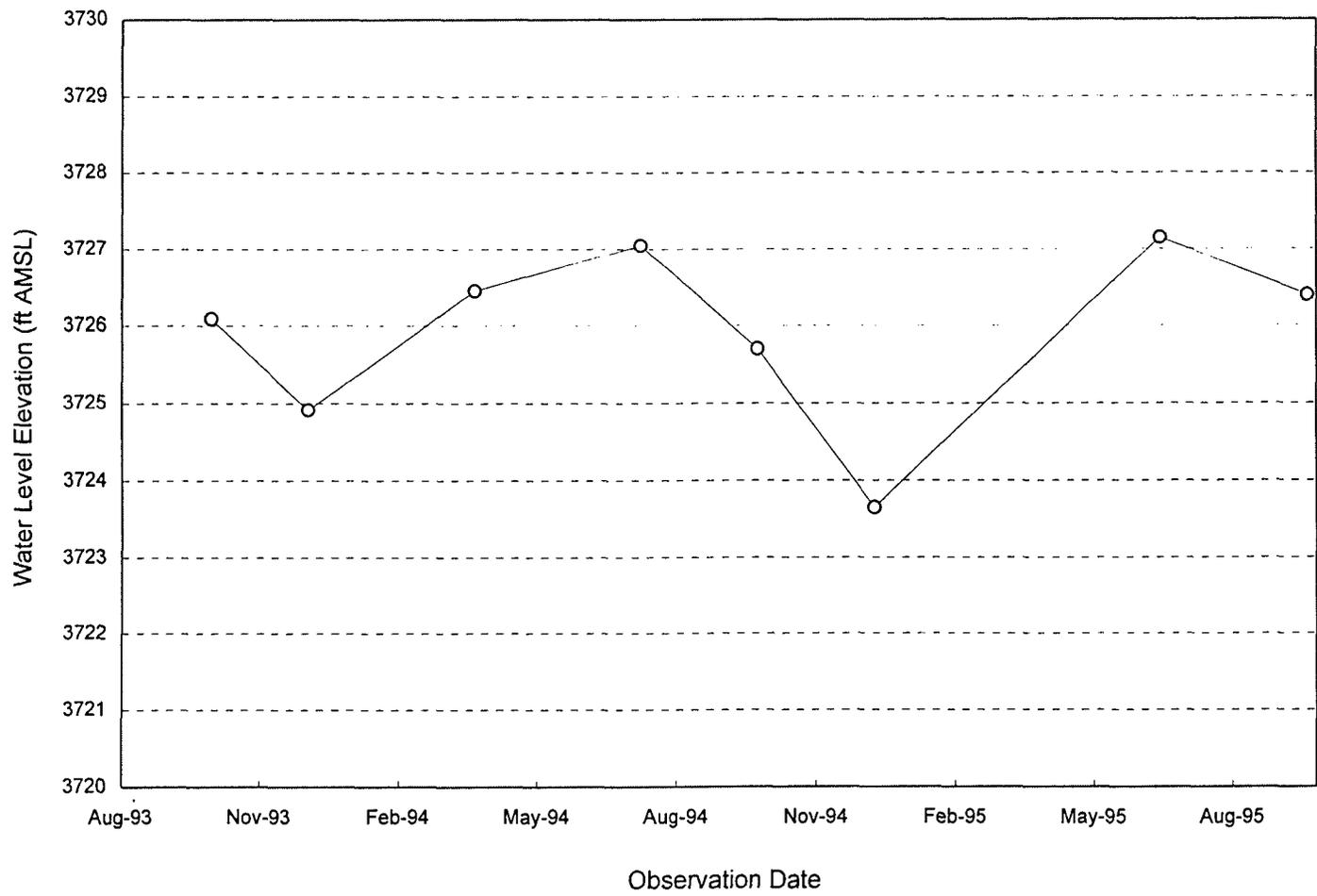
Water Level vs. Time (MW-9S)



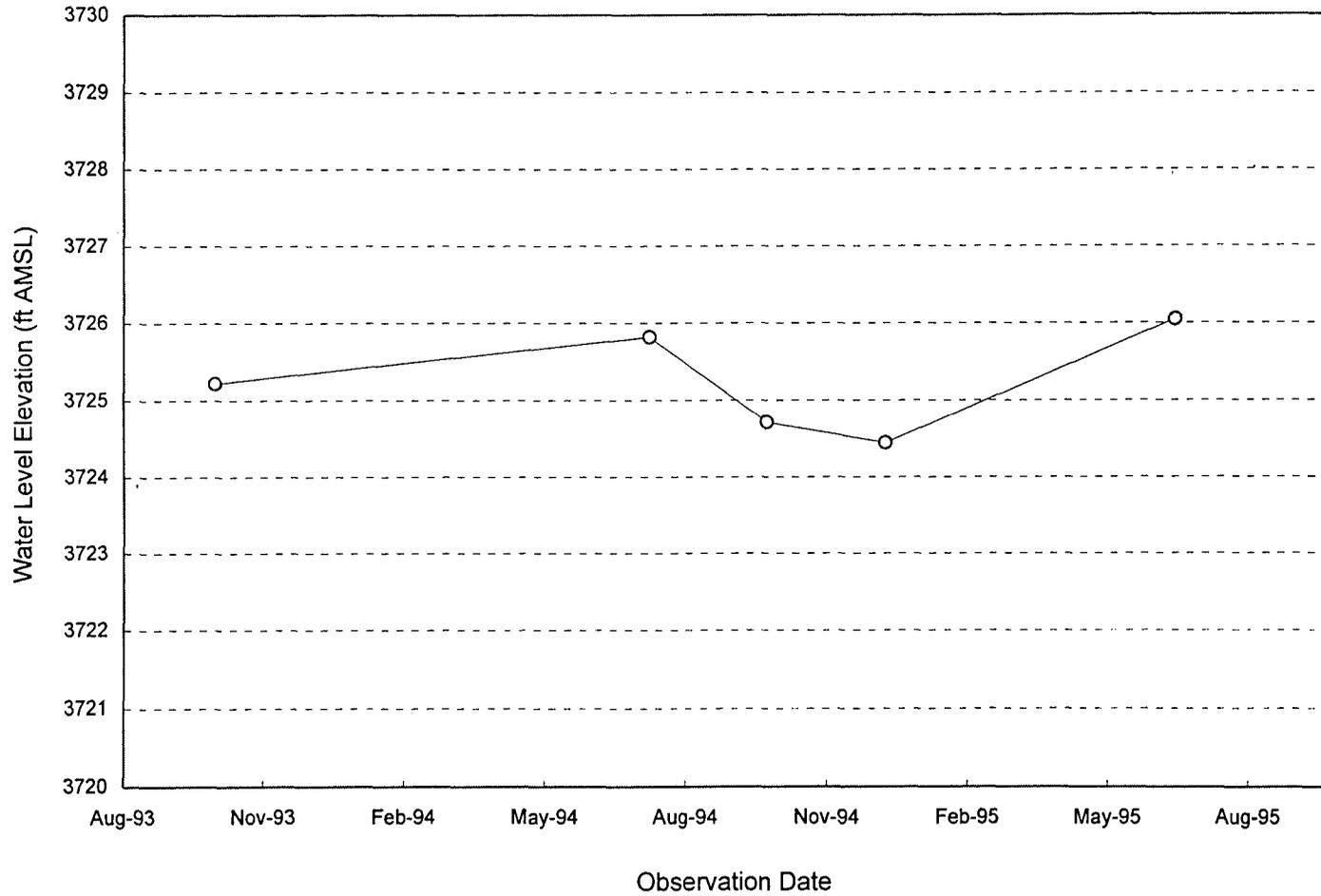
Water Level vs. Time (MW-11)



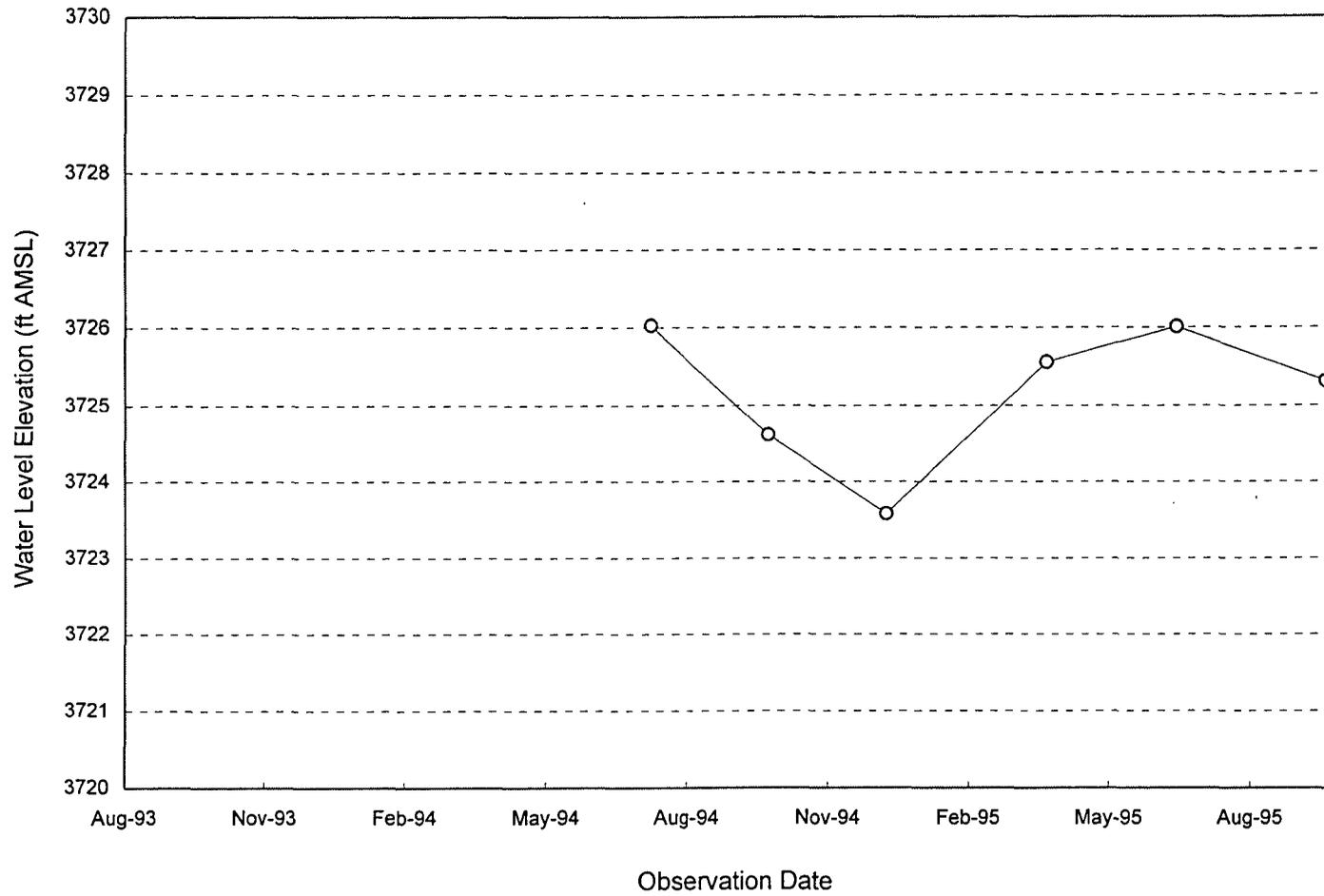
Water Level vs. Time (MW-12)



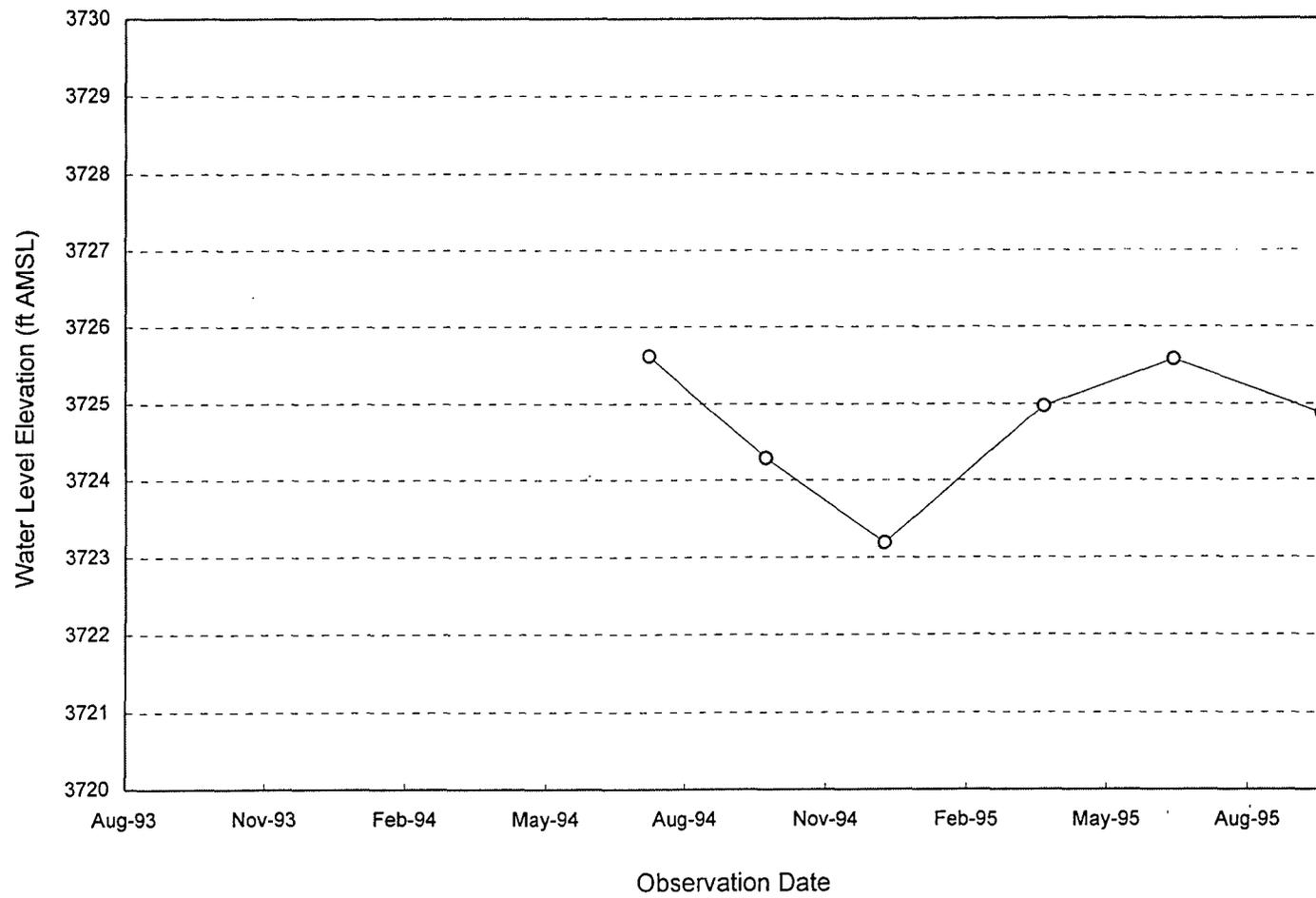
Water Level vs. Time (MW-13)



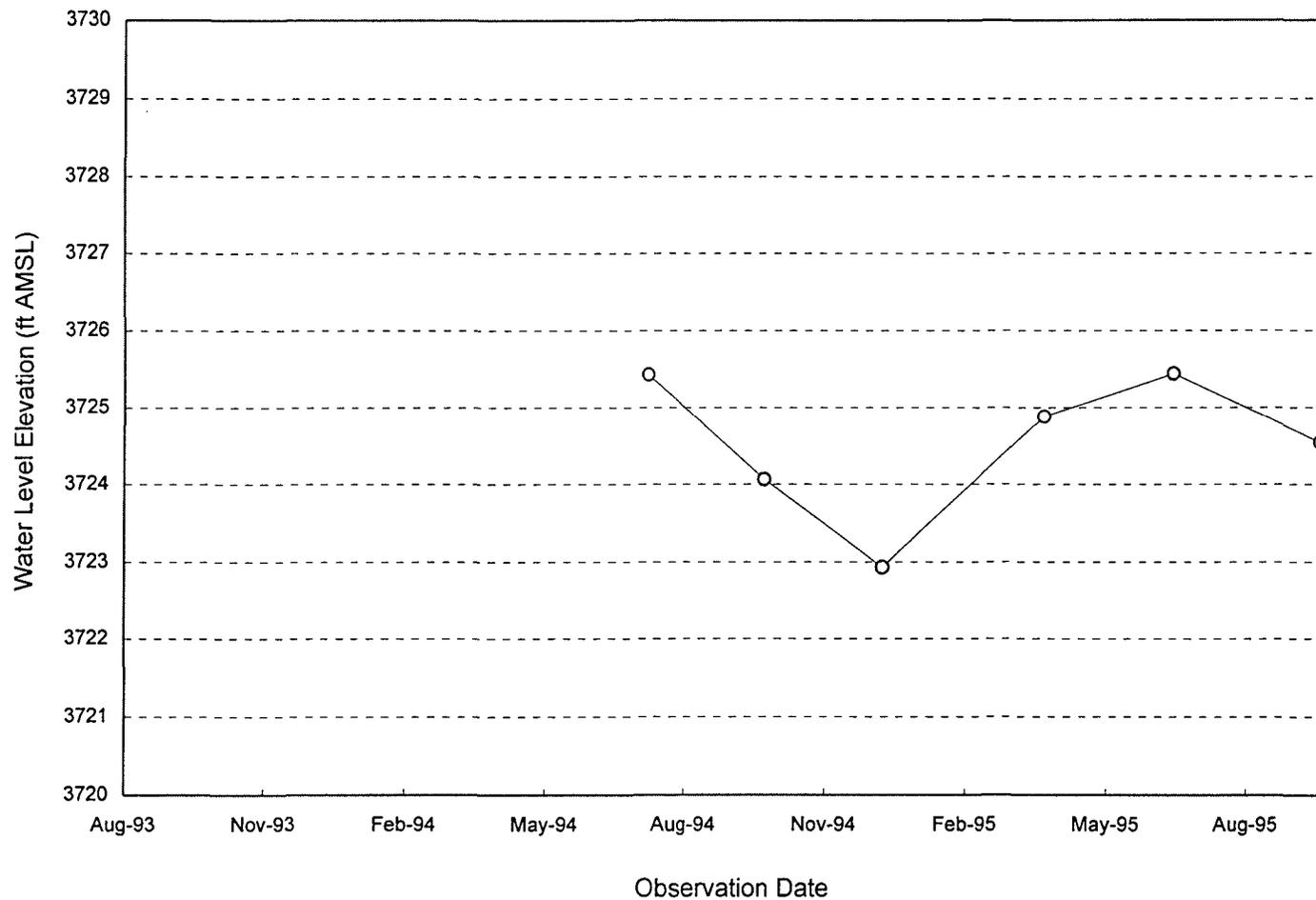
Water Level vs. Time (MW-14)



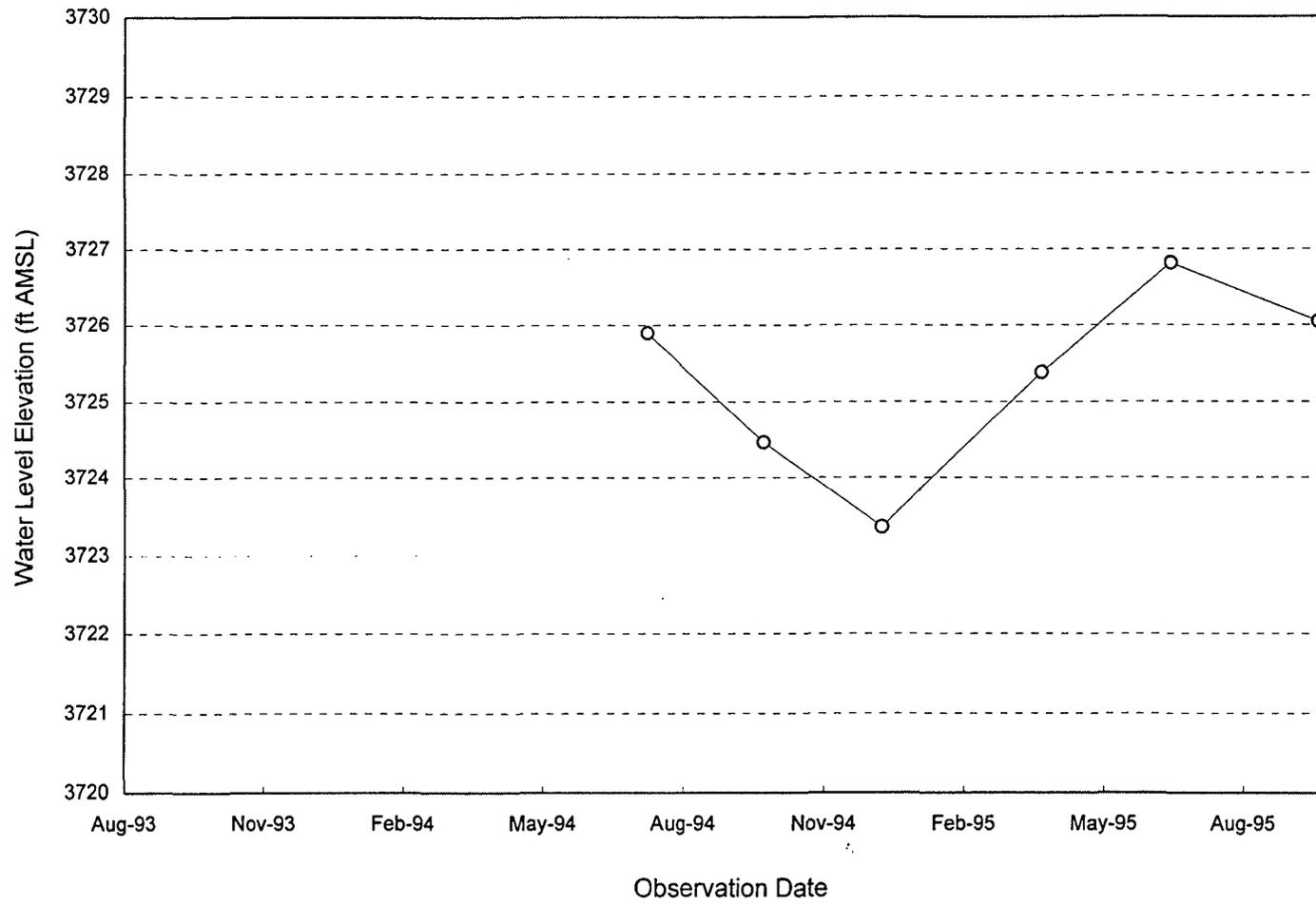
Water Level vs. Time (MW-15)

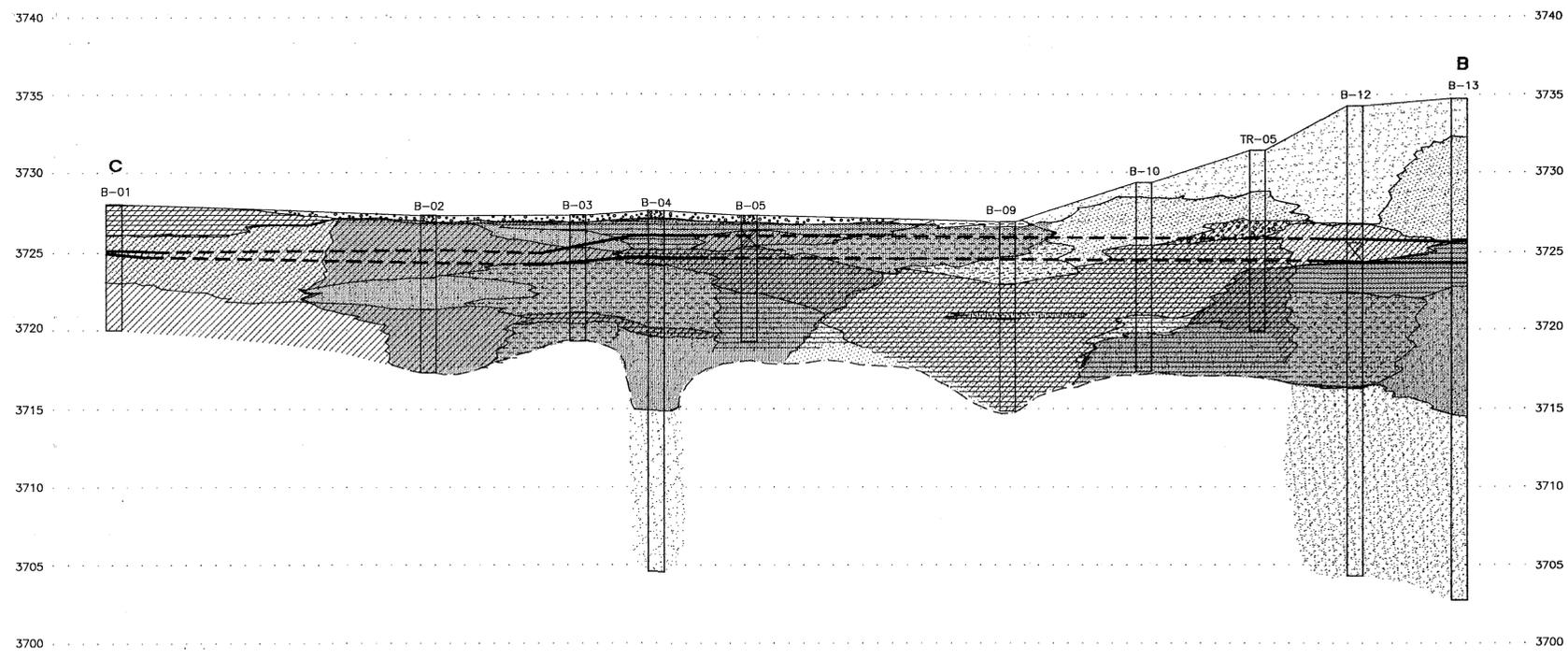
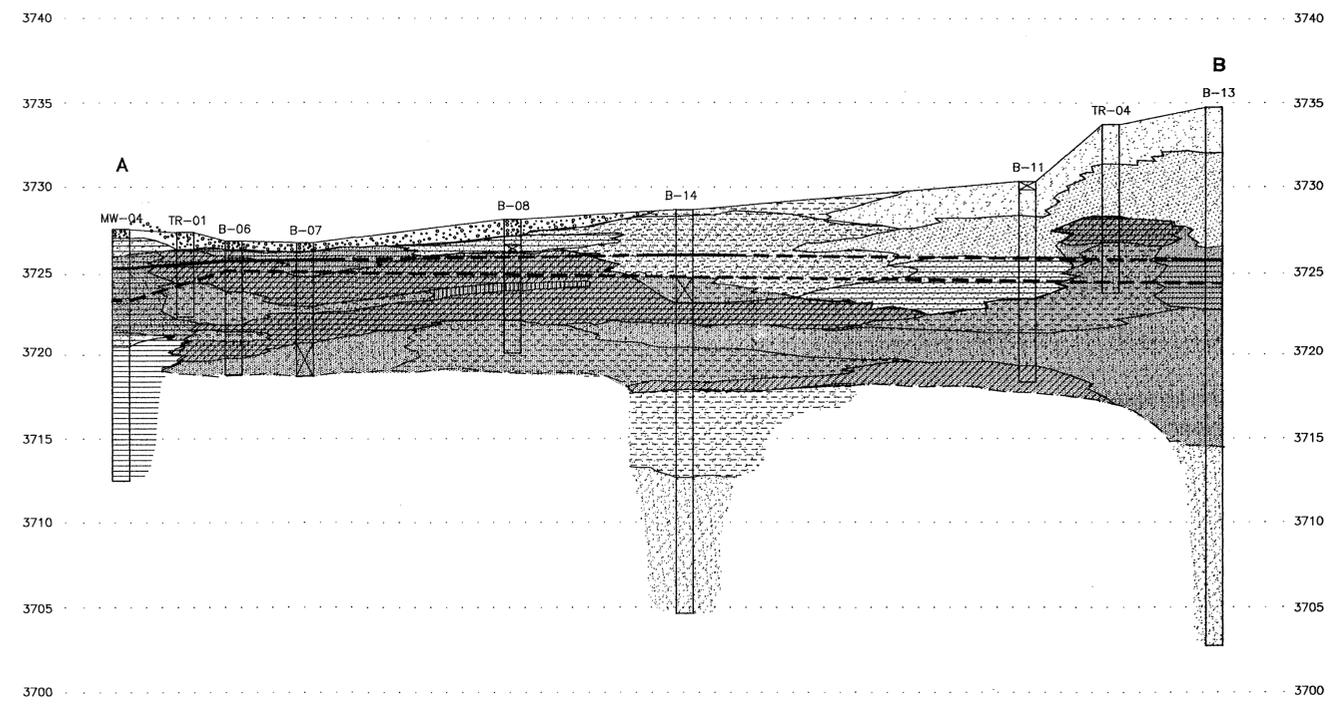
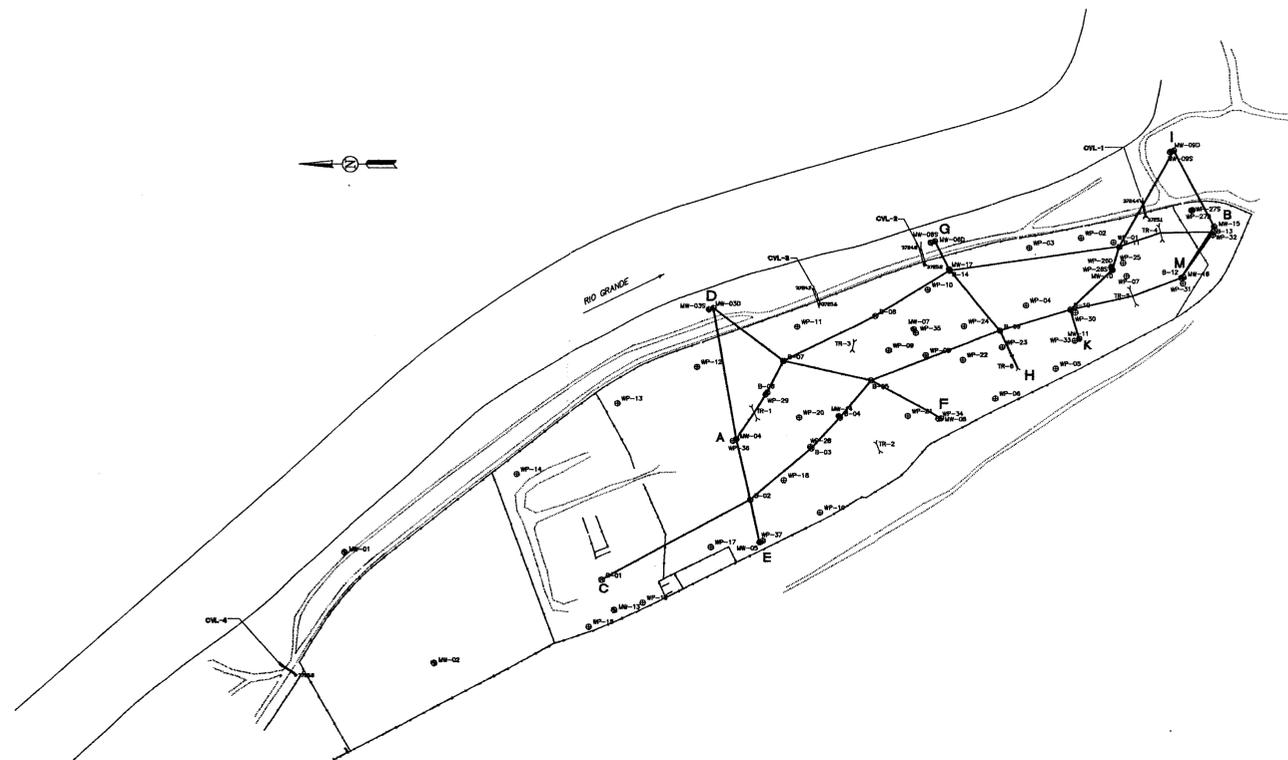


Water Level vs. Time (MW-16)



Water Level vs. Time (MW-17)





**LEGEND**

	GRAVEL		GRAVELLY SILT
	SANDY GRAVEL (GW)		SANDY SILT
	SILTY GRAVEL (GW-GM)		CLAY (CL)
	CLAYEY GRAVEL (GW-GC)		GRAVELLY CLAY (CL)
	SAND		SANDY CLAY (CL)
	GRAVELLY SAND (SW)		SILTY CLAY (CL)
	SILTY SAND (SW-SM)		SILT (ML)
	CLAYEY SAND (SW-SC)		NO RECOVERY, LOST SAMPLE

SMEAR ZONE (DASHED WHERE INFERRED)  
 HIGHEST OBSERVED WATER TABLE LEVEL  
 SMEAR ZONE (DASHED WHERE INFERRED)  
 LOWEST OBSERVED WATER TABLE LEVEL  
 ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE > 100 mg/Kg  
 ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE < 100 mg/Kg

VERTICAL SCALE : 1" = 5'  
 HORIZONTAL SCALE : 1" = 100'

**RECEIVED**  
 JUN 21 1996  
 Environmental Bureau  
 Oil Conservation Division

**GCL**

**PLATE C**  
**GEOLOGIC CROSS-SECTIONS SHOWING**  
**EXTENT OF HYDROCARBONS IN SOILS**  
**AT THE FORMER BRICKLAND REFINERY**  
**(LONGITUDINAL CROSS-SECTIONS)**

CLIENT: REXENE	REV. NO.: 2
DATE: 9/12/95	DRAWN BY: MP
AUTHOR: BAS	FILE: LNGTD1-A.DWG
CK'D BY: BAL	



- LEGEND**
- CONCRETE SLAB/PAD - BLDG FOUNDATION
  - WALL - MASONRY
  - TREE
  - FENCE
  - INTERMITTENT STREAM
  - RIVER
  - MONITORING WELL
  - TEST PIT
  - TEST BORING
  - HAND AUGER BORING
  - SURFACE SAMPLING LOCATIONS
  - CISTERNS SAMPLING LOCATION
  - RIVER SAMPLING LOCATION
  - STORM WATER OUTFALL WITH A DITCH
  - WELL POINT
  - TEST TRENCH
  - GCL SAMPLING LOCATION (AND RESULTS IN mg/kg)
  - EDER SAMPLING LOCATION (AND RESULTS IN mg/kg)
  - SURFACE SAMPLES
  - 400 ppm CONTOURLINE

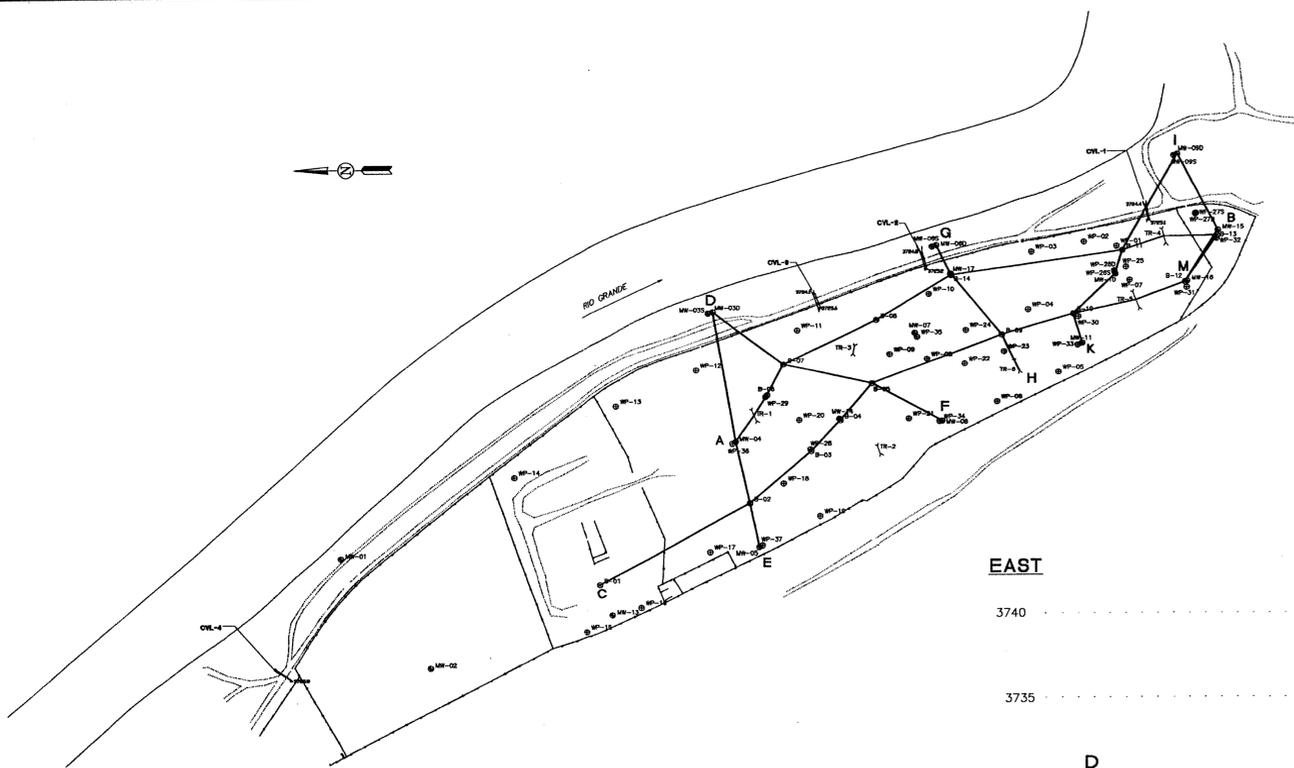
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**FIGURE 11b**  
 DISTRIBUTION OF LEAD IN SOIL SAMPLES  
 SURFACE AND SUBSURFACE

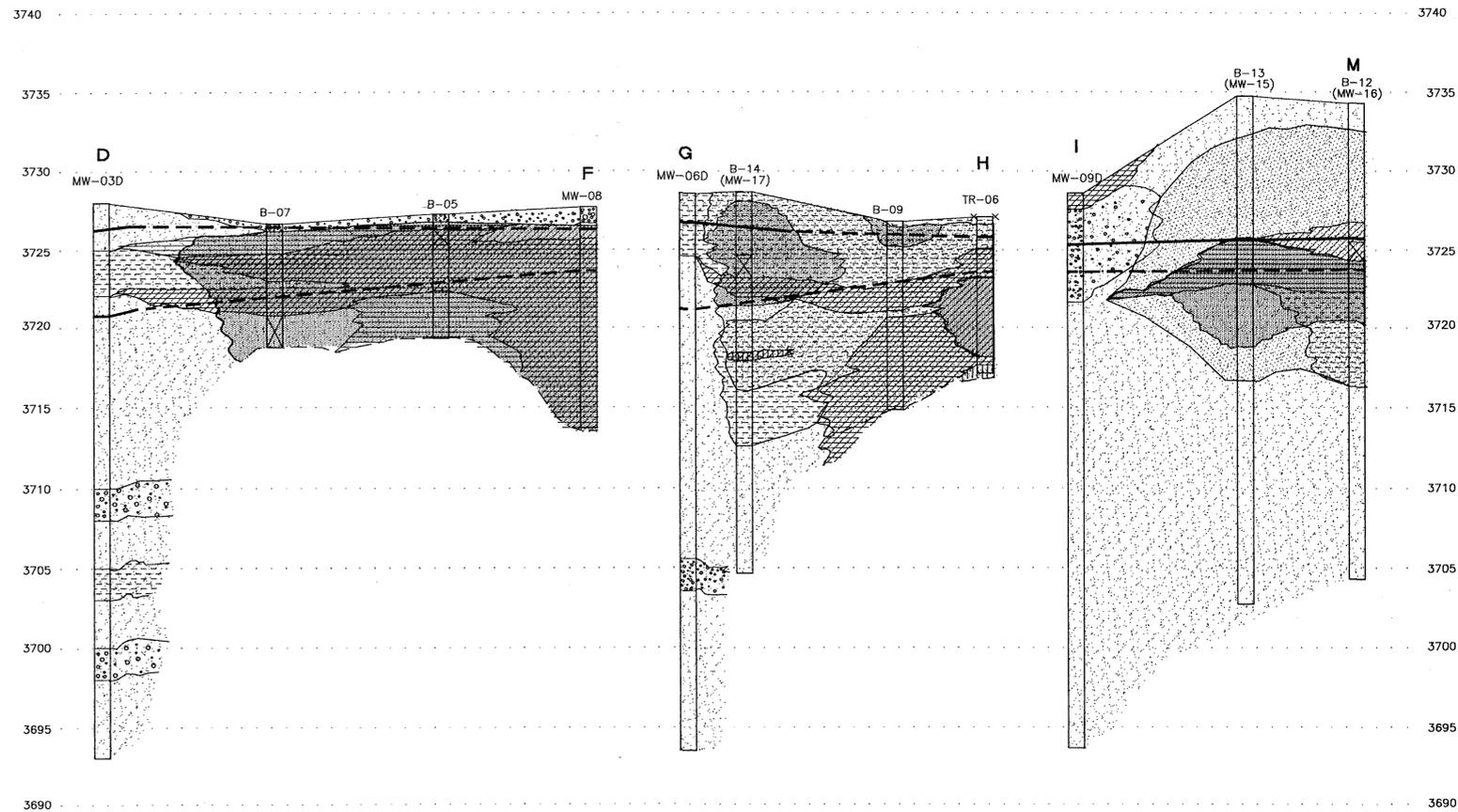
CLIENT: REXENE
DATE: 5/14/96
AUTHORED BY: RR
DRAWN BY: RG
CHECKED BY: RWH
DWG. NO.: D:\REXENE\RXL2.DWG

0 215'  
 SCALE: 2" = 215'



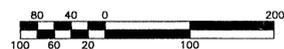
EAST

WEST



**LEGEND**

- |  |                       |  |                          |
|--|-----------------------|--|--------------------------|
|  | GRAVEL                |  | GRAVELLY SILT            |
|  | SANDY GRAVEL (GW)     |  | SANDY SILT               |
|  | SILTY GRAVEL (GW-GM)  |  | CLAY (CL)                |
|  | CLAYEY GRAVEL (GW-GC) |  | GRAVELLY CLAY (CL)       |
|  | SAND                  |  | SANDY CLAY (CL)          |
|  | GRAVELLY SAND (SW)    |  | SILTY CLAY (CL)          |
|  | SILTY SAND (SW-SM)    |  | SILT (ML)                |
|  | CLAYEY SAND (SW-SC)   |  | NO RECOVERY, LOST SAMPLE |
- SMEAR ZONE (DASHED WHERE INFERRED)  
 HIGHEST OBSERVED WATER TABLE LEVEL  
 SMEAR ZONE (DASHED WHERE INFERRED)  
 LOWEST OBSERVED WATER TABLE LEVEL  
 ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE > 100 mg/Kg  
 ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE < 100 mg/Kg



VERTICAL SCALE : 1" = 5'  
 HORIZONTAL SCALE : 1" = 100'



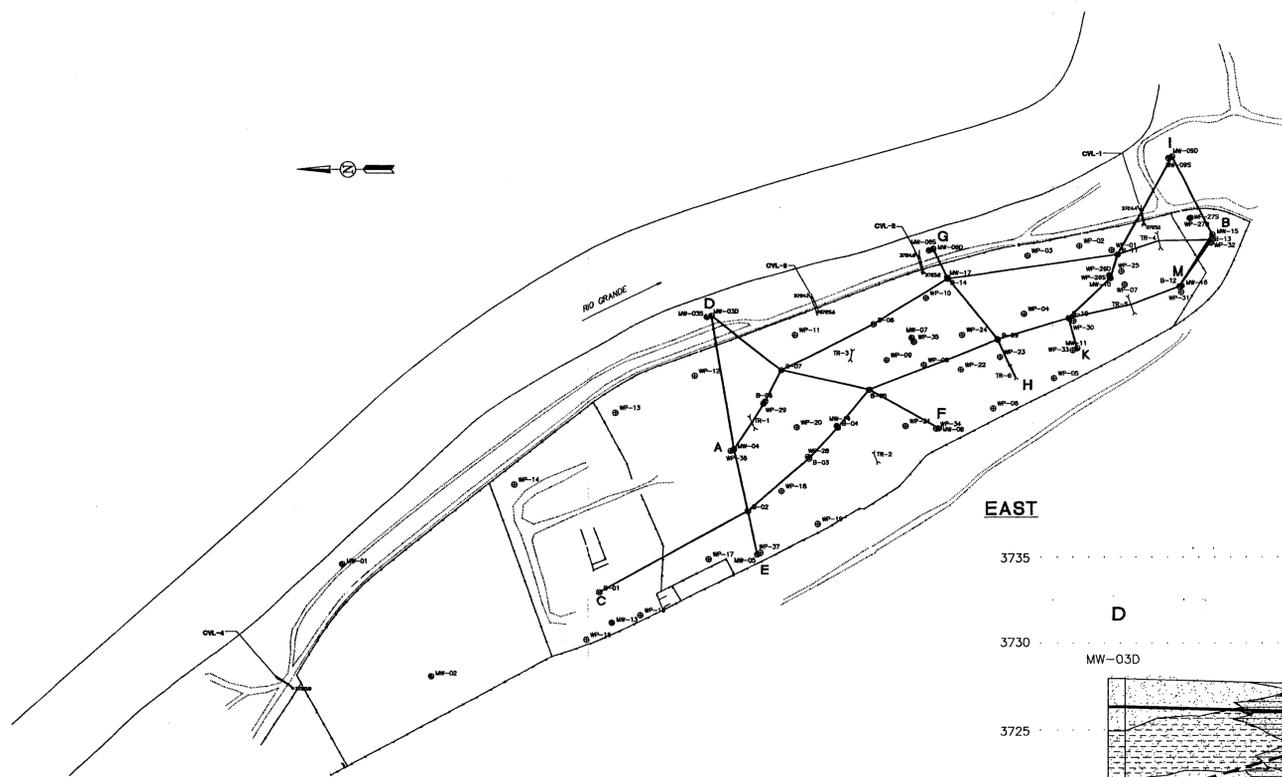
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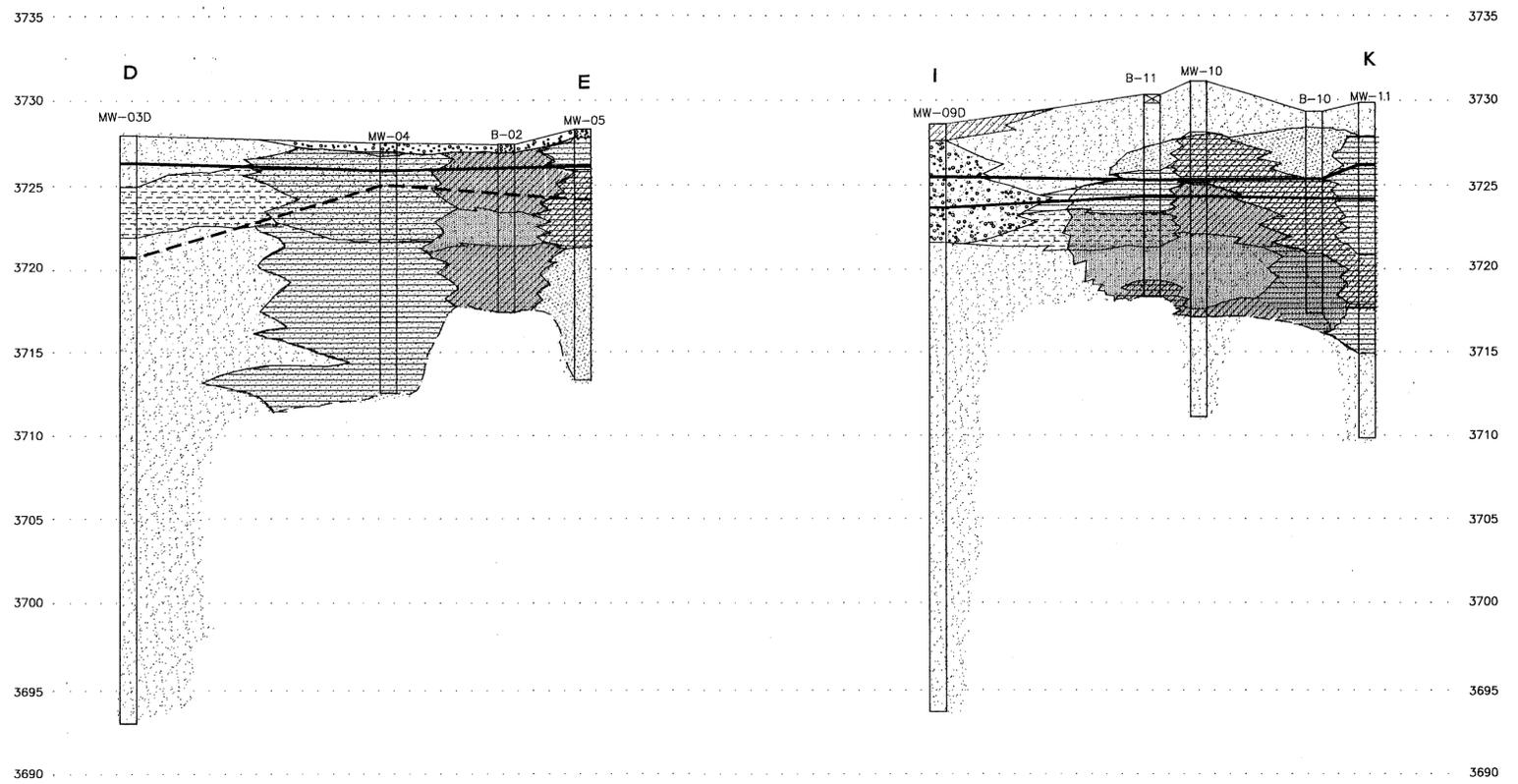
**PLATE B**  
**GEOLOGIC CROSS-SECTIONS SHOWING**  
**EXTENT OF HYDROCARBONS IN SOILS**  
**AT THE FORMER BRICKLAND REFINERY**  
**(TRANSVERSE CROSS-SECTIONS (2 of 2))**

CLIENT: REXENE	REV. NO.: 1
DATE: 9/12/95	DRAWN BY: MP
AUTHOR: BAS	FILE: TRVRS2-A.DWG
CK'D BY: BAL	



EAST

WEST



**LEGEND**

- |  |                       |  |                          |
|--|-----------------------|--|--------------------------|
|  | GRAVEL                |  | GRAVELLY SILT            |
|  | SANDY GRAVEL (GW)     |  | SANDY SILT               |
|  | SILTY GRAVEL (GW-GM)  |  | CLAY (CL)                |
|  | CLAYEY GRAVEL (GW-GC) |  | GRAVELLY CLAY (CL)       |
|  | SAND                  |  | SANDY CLAY (CL)          |
|  | GRAVELLY SAND (SW)    |  | SILTY CLAY (CL)          |
|  | SILTY SAND (SW-SM)    |  | SILT (ML)                |
|  | CLAYEY SAND (SW-SC)   |  | NO RECOVERY, LOST SAMPLE |
- 
- |  |                                    |  |   |
|--|------------------------------------|--|---|
|  | SMEAR ZONE (DASHED WHERE INFERRED) |  | ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE > 100 mg/Kg |
|  | HIGHEST OBSERVED WATER TABLE LEVEL |  | ZONE OF HYDROCARBON CONCENTRATION ESTIMATED TO BE < 100 mg/Kg |
|  | SMEAR ZONE (DASHED WHERE INFERRED) |  |   |
|  | LOWEST OBSERVED WATER TABLE LEVEL  |  |   |



VERTICAL SCALE : 1" = 5'  
HORIZONTAL SCALE : 1" = 100'

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PLATE A  
GEOLOGIC CROSS-SECTIONS SHOWING  
EXTENT OF HYDROCARBONS IN SOILS  
AT THE FORMER BRICKLAND REFINERY  
(TRANSVERSE CROSS-SECTIONS (1 of 2))

CLIENT: REXENE	
DATE: 9/12/95	REV. NO.: 2
AUTHOR: BAS	DRAWN BY: MP
CK'D BY: BAL	FILE: TRVRS1-ADWG