HYDROGEOLOGIC INVESTIGATION OF THE 800 BRIDGE STREET SITE ALBUQUERQUE, NEW MEXICO

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HYDROGEOLOGIC INVESTIGATION OF THE 800 BRIDGE STREET SITE ALBUQUERQUE, NEW MEXICO

INTRODUCTION

On August 13, 1990, Leggette, Brashears & Graham, Inc. (LBG) began a hydrogeologic investigation at the 800 Bridge Street, S.W. site (Figures 1 and 2) at the request of the New Mexico Environmental Improvement Division (NMEID). During the previous year, four bare-steel underground storage tanks were removed (August 3, 1989) from the site, and hydrocarbon contamination was discovered. The NMEID was notified and began an assessment through the Albuquerque Environmental Health Department (AEHD). AEHD found that the contamination had leaked from underground storage tanks or lines or both.

A service station has been in operation at 800 Bridge Street, S.W. since the 1940's. An old tank area was excavated in August of 1989 under the supervision of Richard M. Renn of the AEHD. The approximate area of excavation is shown in Figure 3. The former station area was excavated in October of 1989 to a depth of approximately 11 feet below the surface, according to the owner (personal communication, Bob Pargin, December 7, 1990). An old waste-oil tank, estimated to hold 100 to 150 gallons, was removed on October 16, 1989. New double-lined underground storage tanks were installed in January of 1990.

There are no records from the gas station at 800 Bridge, S.W. of the kinds and quantities of petroleum products stored there. The past owner, Mr. Herman van Steenis, acquired the station in 1951 and installed new tanks in November/December of 1971. He operated the station until December 1978 and then leased the service station from 1979 to 1989. Mr. Robert Pargin bought the service station in December 1989 and is the present owner.

The AEHD performed the initial hydrogeologic investigation during the period from August 1989 to August 1990. AEHD work included the drilling of 19 auger holes (A-1 to A-9, A-11 to A-16, and auger holes NE, NW, SE, SW), installation of four monitor wells (MW-1 to MW-4), and the collection and chemical analysis of water and soil samples from these borings and nearby private wells for hydrocarbon compounds and metals. The results of their investigation are incorporated into this report.

Based upon review of information available from the program of work by the AEHD, a hydrogeologic investigation was designed to characterize the contamination and hydrogeology at the site in accordance with Underground Storage Tank (UST) regulations.

The primary objectives of this investigation were to:

1. define the extent and rate of contaminant migration;
2. define the direction and rate of ground-water flow;
3. determine hydraulic characteristics of the aquifer in the vicinity of the 800 Bridge Street station.

Field work for the hydrogeologic investigation was conducted between October 15 and December 12, 1990. Between October 15 and 18, four additional monitor wells were installed in the vicinity of the station (one onsite and three offsite), five auger holes were drilled (three onsite and two offsite), and eight monitor wells were sampled (two onsite and six offsite).

GEOLOGY

The Albuquerque Basin is in the Rio Grande Rift, a series of structural basins that extends north-south from northern Mexico to south-central Colorado. Material eroded from the surrounding mountains has filled the basin to a thickness locally more than 18,000 feet deep. The Tertiary- and Quaternary-age sediments that fill the basin are known as the Santa Fe Group. The Quaternary flood-plain alluvium in the inner valley is incised into the bordering mesas. The site of this hydrogeologic investigation is in the inner valley.

The inner valley is composed of fluvial deposits of the Rio Grande. In the 1930's, the Middle Rio Grande Conservancy District installed a network of drains to lower the water table and to address the problem of water-logged lands in parts of the inner valley. The Atrisco Riverside Drain is within 400 feet of the 800 Bridge Street site (Figure 2). Sewers were installed in the area about ten

years ago. Geologic logs from wells and auger holes drilled on and near the Bridge Street site are typical of the reworked deposits of the Rio Grande. These logs reveal unconsolidated sand, silt and gravel with lenses of clay.

SOIL BORING

Nine soil borings were drilled onsite and offsite: eight used a hollow-stem auger, and Monitor Well MW-8 had to be hand augered because a drilling rig could not fit under the service station canopy. The purpose of the borings was to determine the extent of soil and ground-water contamination.

Soil samples were taken by the split-spoon method during drilling. Two-foot samples were taken at three to five feet and eight to ten feet in depth. The supervising hydrogeologist examined and logged the samples upon removal from the borehole (Appendix).

After the samples were logged, a fraction was placed in a glass jar and covered with aluminum foil. All were field tested with an HNu photoionization detector calibrated to 100 parts per million (ppm) of isobutylene. At the end of each day, a sample was selected to be sent for laboratory analysis. The selection of a sample for analysis was based upon the HNu readings. In general, the sample with the highest HNu reading was sent to the laboratory. Once a sample was selected, it was placed in a clean glass jar

supplied by the laboratory, labeled and kept on ice until delivery. The samples were delivered to Evergreen Analytical, Inc. in Wheat Ridge, Colorado and were analyzed for benzene, toluene, ethylbenzene, total xylenes (BTEX) and total volatile hydrocarbons (TVH).

MONITOR WELL INSTALLATION

One of the onsite (MW-8) and three of the offsite (MW-5, MW-6, MW-7) soil borings were completed as monitor wells. Wells MW-5, MW-6 and MW-7 were constructed with 15 feet of 2-inch PVC screen and approximately 7 to 10 feet of 2-inch PVC riser (Figure 4). Monitor Well MW-8 was constructed with five feet of steel screen and eight feet of steel riser. After a well was set, the annular space was gravel packed through the augers with silica sand from the bottom of the borehole to one to six feet above the top of the screen. Monitor Well MW-8 was gravel packed from slightly below the screen. A 1/2- to 2-1/2-foot bentonite seal was then placed above the gravel pack, and the annular space was filled with a bentonite-cement grout. The wells were completed at grade with a steel road box, grouted in place, and a locking cap. The wells were developed by bailing until the water was reasonably silt-free or eight to ten well volumes were removed, whichever came first. Some silty wells are to be redeveloped by suction pump.

AQUIFER TESTING

On November 28 and 29, 1990, aquifer tests were completed in Monitor Wells MW-2 and MW-4, respectively. The MW-2 test used a gasoline-driven pump, a 15-psi pressure transducer in pumping well MW-2, a 5-psi pressure transducer in observation well MW-1, a data logger and hand water-level measurements in observation well MW-3. Hand water-level measurements were taken in MW-1 and MW-2 to confirm transducer data throughout the test. The test was run for three hours at 15 gpm and measurements taken for three hours of recovery. Water levels at the wells were also taken the following morning to obtain another point of recovery.

The second test, at MW-4 on November 29, was conducted in the same manner but the pumping rate was 18 gpm and MW-8 was the observation well. Well MW-4 was pumped for four hours and measurements taken for three hours of recovery.

In both tests, the static water level was measured in each well prior to conducting the test. The pressure transducer was set in each well approximately 0.5 foot above the well bottom. A brief step test was conducted for each test to set the discharge rate in the pump. After each step test, there was a half-hour wait to allow the water levels to recover. The data logger was activated and recorded static readings for approximately five to ten seconds before turning the pump on. The data logger was programmed to take water-level readings at one-second intervals for the first

five minutes of the pumping and recovery phases and 20-second intervals thereafter.

The data were analyzed by the Jacob semi-log and Theis non-equilibrium curve methods (Figures 5-8). Drawdown for observation and pumping wells was plotted as a function of t/r^2 on a logarithmic plot (Figures 5 and 7). Drawdown at the pumping well reflects the effect of partial penetration. The saturated screened interval of the pumping well is ten feet. A partially-penetrating pumping well displays drawdowns larger than a fully-penetrating one, and the effect of partial penetration is confined to the area near the pumping well. The observation well is far enough from the pumping well that the effects are not significant. Transmissivity (T) values estimated from the specific capacity of the pumping wells are less than T values from analysis of the observation wells. The pattern is thought to reflect the effect of partial penetration.

The transmissivity obtained from the specific capacity for pumping well MW-2 is 18,000 gallons per day per foot (gpd/ft), assuming that T = Q/s x 2000, where the pumping rate (Q) is 15 gpm and drawdown (s) at the pumping well is 1.6 feet. The T obtained from the specific capacity for pumping well MW-4 also is 18,000 gpd/ft (T = Q/S x 2000, where Q = 18 gpm and S at the pumping well is two feet). A T of 18,000 gpd/ft and a well-screen thickness of ten feet yields a hydraulic conductivity (K) of 240 ft/day.

Transmissivity values were obtained from semi-log plots (t/t') of residual drawdown during recovery at observation wells. The t/t' plots for observation wells MW-1 and MW-8 during recovery are shown in Figures 6 and 8. The tested thickness of the aquifer was estimated by comparing the transmissivity determined from the specific capacity at the pumping well with the transmissivity obtained from the semi-log plots. The thickness of the aquifer was estimated by dividing the hydraulic conductivity of 240 ft/day into a T of 80,000 gpd/ft, the average T value obtained at the recovery observation wells. The implied thickness is 45 feet, which is a reasonable value.

Storage coefficients (S) were obtained by curve matching the type curve with observation-well and pumping-well drawdown data. T values, ranging from 75,000 gpd/ft to 90,000 gpd/ft, obtained from the observation-well recovery plots were used to calculate the S values from the type curve. Both test curves yield an S of 0.1.

GROUND-WATER FLOW

Ground-water levels were measured five times by LBG between October 31 and December 12, 1990 (Table 1), and the trends are shown in Figure 9. Figure 10 shows water elevations for November 28, 1990. During the month-and-a-half of record, ground-water elevations declined in all eight monitoring wells. The smallest change in water level was at the

service station, Monitor Wells MW-4 and MW-8, which are paved. At the other six monitor wells, the decline was larger, ranging from 0.46 feet at MW-1 to 0.93 feet at MW-5. On November 26, 1990, the measuring point in the Atrisco Riverside Drain was surveyed and the elevation of the drain water was 4,931.88 feet above sea level, which is about two feet below the water table. Therefore, the drain acts as a ground-water discharge point. The Atrisco Drain water level fluctuated up to two feet in elevation in 1986 at Rio Bravo Boulevard (Peter, 1987, p.26).

The local hydraulic gradient is approximately 0.003 which is steeper than the regional gradient reported by Peter (1987) of 0.001 for this area.

A sanitary sewer underlies LaVega Street, and the bottom of the 18-inch-diameter sewer line is at least a foot below the water table (Figure 10). The gradient on the sewer line is 0.001, suggesting that it is not controlling the shape of the water table.

A search was made for well records of private wells within a 1,000-foot radius of the 800 Bridge Street site and public wells within a mile radius. Although there are many wells in the area, only four of them have a record at the State Engineer's Office (Appendix).

The three-dimensional shape of the plume is not fully characterized by the existing water-table wells. There is probably a vertical component of flow in the shallow

aquifer. Nested piezometers in the shallow aquifer along Rio Bravo Boulevard show a vertical hydraulic gradient of 0.0051 with a standard deviation of 0.0017 (Peter, 1987, p.19). Although the vertical hydraulic gradient is comparable in magnitude to the horizontal hydraulic gradient, the dissolved phase would not be expected to migrate downward rapidly if a small vertical hydraulic conductivity of clay lenses (0.001 ft/day, Peter, 1987, p.22) controls vertical flow. Kernodle, et al. (1987) used a ratio of vertical to horizontal conductivity of 1:500 in their three-dimensional model of the Albuquerque-Belen Basin. This implies a much higher vertical conductivity. Significant vertical flow could explain the decrease in concentration of dissolved BTEX at the water table as the plume migrates away from the source. A monitor well at depth would provide information on the vertical flow component.

For a hydraulic gradient of 0.003 and a permeability of 240 ft/day, the specific discharge is 0.7 ft/day or 260 ft/year. The average linear velocity is 70 ft/day or 2,600 ft/year, assuming a drainable porosity of ten percent. The 600-foot plume would likely flush through naturally on a time scale of less than one year.

WATER-QUALITY SAMPLING PROCEDURES

Water samples were taken by LBG from the auger holes, monitor wells and private residences in and near the site.

Prior to sampling the eight monitor wells on October 30, 1990, the monitor wells were evacuated of three standing volumes of water with PVC bailers. The wells were sampled with stainless-steel bailers which were decontaminated between wells in a solution of Alconox soap and water and rinsed with distilled water. The water samples were collected in 40-milliliter glass septum vials preserved in a 0.1 M HCl solution. The vials were kept on ice and shipped by overnight mail with a chain-of-custody form to Evergreen Analytical Inc., Wheat Ridge, Colorado. Water from the auger holes and from the taps of private residences were collected in the same way. On November 28 and 29, 1990, water was sampled from the pumped wells MW-2 and MW-4 during the two aquifer tests after at least two hours of pumping. Discharged water was collected in 40-milliliter glass septum vials preserved in 0.1 M HCl solution, kept cold and shipped overnight with a chain-of-custody form to Analytical Technologies Inc., Tempe, Arizona.

WATER-QUALITY RESULTS

The results of ground-water sampling by LBG are listed in Table 2, and results by the Albuquerque Environmental Health Department (AEHD) are in Table 3. The laboratory reports for the LBG data are found in the Appendix. The hydrocarbon results of ground-water sampling by LBG are shown in Figure 11 and by the AEHD in Figure 12. The metal

concentrations in ground water sampled by the AEHD are shown in Figure 13; and the levels of pH, conductivity and dissolved oxygen measured by LBG are shown in Figure 14.

The soil and ground-water petroleum hydrocarbon data from eight monitor wells, 24 auger holes, and ground-water data from six private wells define the horizontal extent of contamination. The area of known petroleum hydrocarbon contamination on Figures 11 to 15 is approximately 600 feet long and 200 feet wide. The highest concentrations are found in the southeastern quarter of the 800 Bridge Street site and south of the site, in the direction of ground-water flow. The water and soil concentrations were below the NMEID action levels at Monitor Well MW-7, which is south of the site. Upon drilling this well, a strong sulfide odor was detected. The sulfide odor may be due to sewage from household sources, which are common in this part of town, or possibly from a broken sewer line. The introduction of sewage to the subsurface would displace petroleum hydrocarbons. The hydrocarbon plume extends east of LaVega Street but, in this area, only benzene has exceeded the NMEID action level of 10 ppb; e.g., benzene at A-9 was 26 ppb and at AH-5 was 23 ppb.

Monitor wells MW-1, MW-2, MW-3 and MW-4 were sampled on February 19 and October 30, 1990 for BTEX (Tables 2 and 3). The levels in MW-1, MW-2 and MW-3 are too low to conclude whether the decline is real or due to being near the

detection limit, differences in sampling, or the laboratory used. The increase in BTEX concentration for Monitor Well MW-4 is attributed to MW-4 being at the source of contamination, where dissolved petroleum hydrocarbon levels are expected to be high but to fluctuate due to soil heterogeneity.

MTBE was undetected at the five auger holes sampled.

Metal concentrations were analyzed in water samples from 11 of the auger holes drilled by the AEHD. All samples were below the NMEID action levels for lead and zinc. Monitor Wells MW-1 to MW-4 were sampled on February 19, 1990 by the AEHD and on October 30, 1990 by LBG for BTEX. The levels went down in MW-1, MW-2 and MW-3 and up in MW-4. Figure 13 shows the location of concentrations of iron and manganese above the NMEID action levels. Elevated levels of manganese and iron are common in the inner valley. Approximately three-fourths of the inner-valley manganese concentrations exceed NMEID action levels (Gallaher et.al., 1987, p.70). The pattern of manganese contamination generally correlates with the pattern of septic tank discharge (ibid.). Microbial decomposition of septic tank discharge and drainage of water-logged soils and subsequent decay of organic matter in these sites create the oxygen-deficient conditions that favor the dissolution of iron and manganese.

The highest levels of iron and manganese occur where the highest levels of hydrocarbon contamination are found.

Dissolved iron and manganese levels increase as the ground water becomes anoxic due to bacterial reactions which decompose the petroleum hydrocarbons.

The pH, conductivity and dissolved oxygen levels were measured December 12, 1990. Prior to taking measurements, each well was evacuated of three wellbore volumes; and the water sample was collected in a glass jar with a peristalic pump. New tubing was used for each well, and the bailers were decontaminated with a solution of Alconox and water between wells. The results are shown in Figure 14. pH ranges from 6.96 to 7.85, conductivity ranges from 487 to 852 micromhos/cm, and dissolved oxygen ranges from 1.84 to 5.28. Dissolved oxygen levels are lower within the plume than outside, except for MW-2. In comparison, on March 21 to 22, 1984, the dissolved oxygen concentrations ranged from 8.6 to 9.5 mg/l in the Rio Grande at Barelas Bridge, the extension of Bridge Boulevard over the Rio Grande (Potter, 1984). Dissolved oxygen concentrations are lower and iron and manganese concentrations are higher than background where petroleum hydrocarbon contamination is known to exist.

The eight monitor wells were tested on November 11, 1990, for the presence of free product. First, depth-to-fluid measurements were made on a steel tape to the nearest 1/100th of a foot. Water-indicating paste and chalk were then used to determine water levels and the thickness of floating product. No floating product was found in any of

the wells. In addition, floating product was not detected by LBG during the drilling of any of the monitor wells or auger holes.

SOIL QUALITY

Results of the hydrocarbon concentrations in soil are listed in Table 4 and shown in Figure 10. The soil borings show that there are petroleum hydrocarbons in about eight to ten feet of soil above the water table. Hydrocarbons in the soil could be transported to the water table by gravity and fluctuations in the water table. Ground-water elevations declined as much as 0.93 foot in one-and-a-half months from October 31 to December 12, 1990. Changes in the water table probably reflect changes in the Atrisco Drain, local irrigation, regional pumpage and Rio Grande levels. The Atrisco Drain at Rio Bravo Boulevard fluctuated two feet in 1986 (Peter, 1987). There may be comparable fluctuations in the water table over a year. Hydrocarbons in the soil may be carried to the water table by infiltrating rainfall.

The geologic logs (Appendix) show that hydrocarbons were detected below the asphalt surface at the borings at the site (AH-2, AH-4). Farther from the source, hydrocarbons were detected at greater depth (three to five feet at MW-7, six to eight feet at MW-6, five to eight feet at AH-5).

CONCLUSIONS

LBG work from August through December, 1990 leads to the following conclusions:

1. The source of contamination is the service station at 800 Bridge Street, S.W. The highest levels of contamination have been found at and just south of the station. Petroleum hydrocarbon concentrations decrease in the direction of ground-water flow towards the south.

2. The soil and ground-water petroleum hydrocarbon data from eight monitor wells, 24 auger holes and ground-water data from six private wells define the horizontal extent of contamination. The plume is approximately 600 feet long and 200 feet wide.

3. The depth of contamination has not been determined. An additional monitor well completed at a depth of 100 to 150 feet would document vertical gradients and whether contamination is spreading downward.

4. No measurable amount of floating product was present in any of the LBG monitor wells and auger holes.

5. Based upon two aquifer tests performed on November 28 and 29, 1990, the transmissivity and storativity are 80,000 gpd/ft and 0.1. The hydraulic conductivity and aquifer thickness are 240 ft/day and about 50 feet.

6. Flow through the zone of known contamination is relatively rapid. Biodegradation and natural attenuation in the downgradient direction is effective in reducing contamination levels to below standards.

7. The high levels of contamination found at the northern end of the plume are expected to migrate towards the south in the direction of ground-water flow. Corrective action near the source of the plume is recommended.

8. The southern end of the plume has low levels of contamination but is located near private wells. They should be monitored closely. Corrective action would be justified if standards are exceeded in the future in this part of the plume.

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TABLES

TABLE 1

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET S.W. SITE
GROUND-WATER LEVELS

DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8
10/31/90	4933.50	4933.35	4933.37	4934.67	4934.28	4934.15	4934.58	4934.98
11/14/90	4933.31	4933.15	4933.13	4934.55	4934.09	4934.02	4934.45	4934.92
11/28/90	4933.08	4932.91	4932.93	4934.56	4933.62	4933.54	4934.04	4934.76
11/29/90	4933.05	4932.94	4932.91	4934.53	4933.60	4933.53	4934.03	4934.75
12/12/90	4933.04	4932.92	4932.89	4934.50	4933.58	4933.51	4934.11	4934.71

TABLE 2

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RECORDS OF WATER QUALITY
COLLECTED BY LEGGETTE, BRASHEARS & GRAHAM, INC.
800 BRIDGE SITE

DATE	SAMPLE NO.	PPB BENZENE	PPB TOLUENE	PPB ETHYL-BENZENE	PPB TOTAL XYLENES	PPB MTBE	PPM TVH
10/5/90	TAP WATER 140 LaVega	U	U	U	U		U
10/5/90	TAP WATER 152 LeVega	U	U	U	U		U
10/11/90	TRIP BLANK	U	U	U	1.6	U	U
10/15/90	AH-1	2	1.8	U	U	U	U
10/15/90	AH-2	2600*	1400*	1900*	14000*	U	73.6
10/15/90	AH-3	1.5	0.6	1.4	0.8	U	1
10/15/90	AH-4	23*	18	150	22	U	15.7
10/15/90	TRIP BLANK	U	U	0.7	3	U	U
10/16/90	AH-5	23*	0.8	0.7	10	U	1
10/30/90	MW-1	2.6	0.5	U	1.7		U
10/30/90	MW-2	U	0.2	U	1		U
10/30/90	MW-3	U	0.4	U	1.3		U
10/30/90	MW-4	590*	35.3	518.4	1871.1*		5
10/30/90	MW-5	U	0.5	U	1.5		U
10/30/90	MW-6	10.7*	33.3	32.7	175.5		4
10/30/90	MW-7	9.8	3	20.8	4.9		1
10/30/90	MW-8	220*	120	960*	1140*		9
10/30/90	FIELD BLANK	U	0.5	U	0.8		U
10/30/90	TRIP BLANK	U	0.7	U	1.5		U
10/31/90	TAP WATER 153 LaVega	U	0.6	U	2		U
11/27/90	TRIP BLANK	U	U	U	U		
11/28/90	MW-2	U	1.1	U	0.6		0.7
11/29/90	MW-4	49	1	8.4	14		0.9
NMEID Action Levels		10	750	750	620	100	

* Concentration is above NMEID action level

U = Undetected

ppb = Parts per billion

ppm = Parts per million

TVH = Total volatile hydrocarbons

TABLE 3

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RECORDS OF WATER QUALITY SAMPLES
COLLECTED BY ALBUQUERQUE ENVIRONMENTAL HEALTY DEPARTMENT
800 BRIDGE STREET SW

SAMPLE DATE	LOCATION	PPB BENZENE	PPB TOLUENE	PPB ETHYL-BENZENE	PPB TOTAL XYLENES	PPM IRON	PPM MANGANESE	PPM LEAD	PPM ZINC
8/8/89	NW 800 BRDG	10*	190	0	2				
8/8/89	NE 800 BRDG	70*	220	68	44				
8/8/89	SW 800 BRDG	U	250	U	U				
8/8/89	SE 800 BRDG	500*	120	930*	370				
	A-1	1	U	U	U				
9/12/89	A-2	5700*	4100*	29000*	20700*	10.2*	1.78*	0.011	0.082
9/12/89	A-3	2.6	4.1	25	18.9	U	1.12*	U	0.02
9/12/89	A-4	U	U	U	U				
9/13/89	A-5	10000*	7000*	14500*	40500*				
9/13/89	A-6	1650*	160	1620*	930*				
9/26/89	A-7	3900*	7500*	9700*	30500*	12.5*	1.55*	0.026	0.052
9/26/89	A-8	160*	490	2100*	9500*	7.5*	0.601*	0.029	0.051
9/27/89	A-9	26*	5	8.8	7.4	0.568	1.14*	U	0.019
10/11/89	A-11	7700*	2800*	5700*	19000*	12.2*	1.35*	0.018	0.071
10/11/89	A-12	U	U	U	U	0.423	0.36*	U	0.013
10/10/89	A-13	2000*	U	U	U	6.96*	0.992*	0.012	0.034
11/8/89	A-14	U	U	U	U	0.859	0.451*	U	0.018
11/8/89	A-15	300*	U	U	U	2.45*	1.08*	0.003	0.021
11/8/89	A-16	U	U	U	U	0.289	0.41	U	U
2/19/90	MW-1	4.8	7.2	U	U				
2/19/90	MW-2	5.7	7.2	U	U				
2/19/90	MW-3	U	2.6	U	U				
2/19/90	MW-4	190*	25	280	865*				
9/13/89	145 LA VEGA	U	U	U	U				
8/10/89	183 RIVERSIDE	U	U	U	U				
8/11/89	183 RIVERSIDE	U	U	U	U				
10/4/89	154 LA VEGA	U	U	U	U				
10/4/89	152 LA VEGA	U	U	U	U				
10/16/89	153 LA VEGA	U	U	U	U				
NMEID Action Levels		10	750	750	620	1	0.2	0.05	10

* Concentration is above NMEID Action Level
U = Undetected
Ppb = Parts per billion
Ppm = Parts per million

TABLE 4

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
RECORDS OF HYDROCARBON CONCENTRATIONS IN SOIL
800 BRIDGE SITE

DATE	SAMPLE NO.	PPB BENZENE	PPB TOLUENE	PPB ETHYL-BENZENE	PPB TOTAL XYLENES	PPM TVH
10/15/90	AH-1	ND	3	1.2	12	0.1
10/15/90	AH-2	ND	ND	160	1100	79*
10/15/90	AH-3	1	58	16	140	ND
10/15/90	AH-4	ND	1300	7900	24000	995*
10/16/90	AH-5	ND	0.5	ND	4	0.5
10/16/90	MW-5	ND	6.3	1.9	14	ND
10/16/90	MW-6	ND	240	3700	15000	548*
10/18/90	MW-7	ND	160	210	1700	10.6
10/18/90	MW-8	ND	140	1600	3300	256*
NMEID Action Levels		10000				50

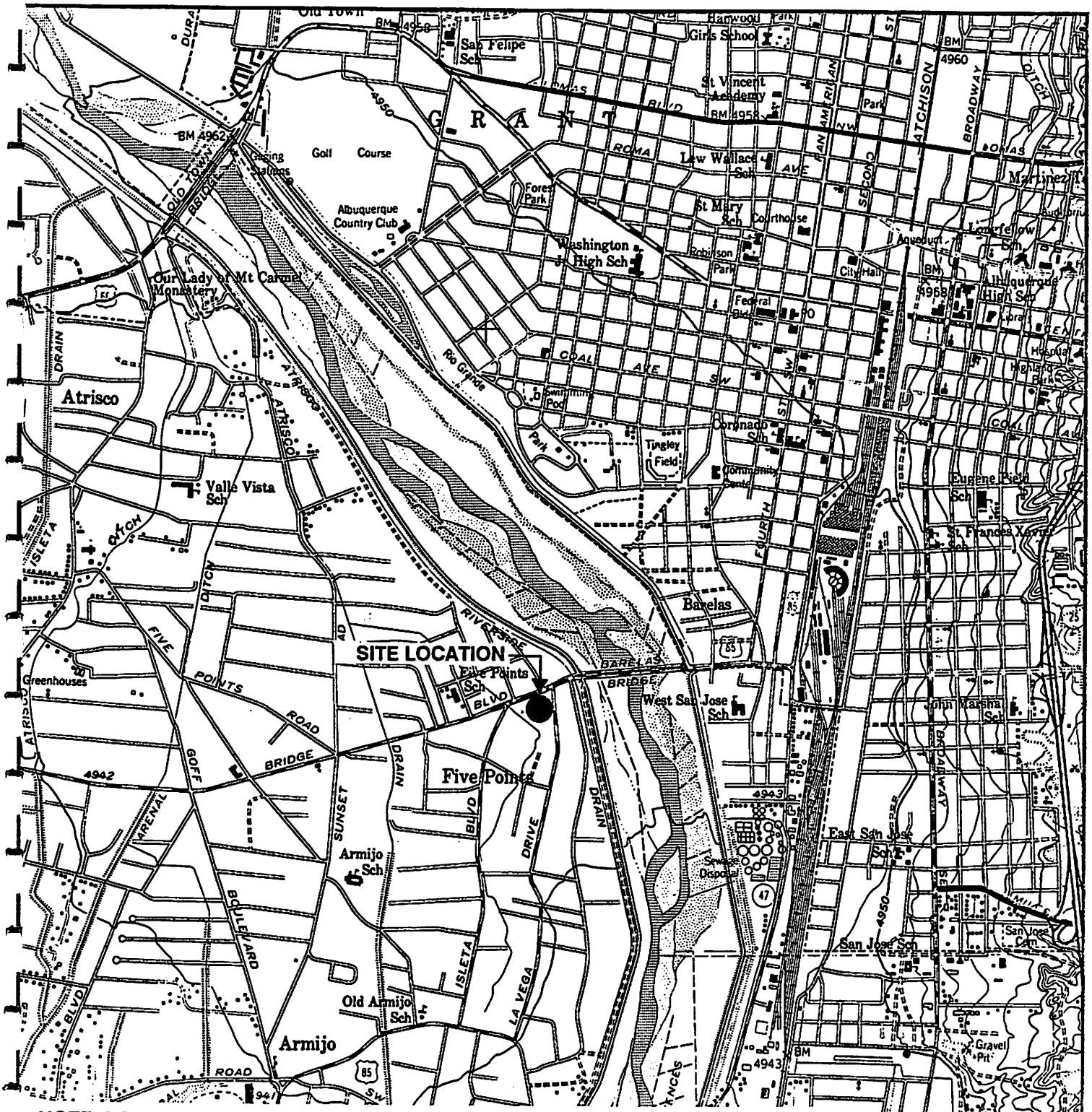
* Concentration is above NMEID Action Level

U = Undetected

PPB = Parts per billion

PPM = Parts per million

FIGURES



NOTE: PORTION TAKEN FROM ALBUQUERQUE WEST, NEW MEXICO QUADRANGLE

32

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET SITE

SITE LOCATION MAP

DATE	REVISED

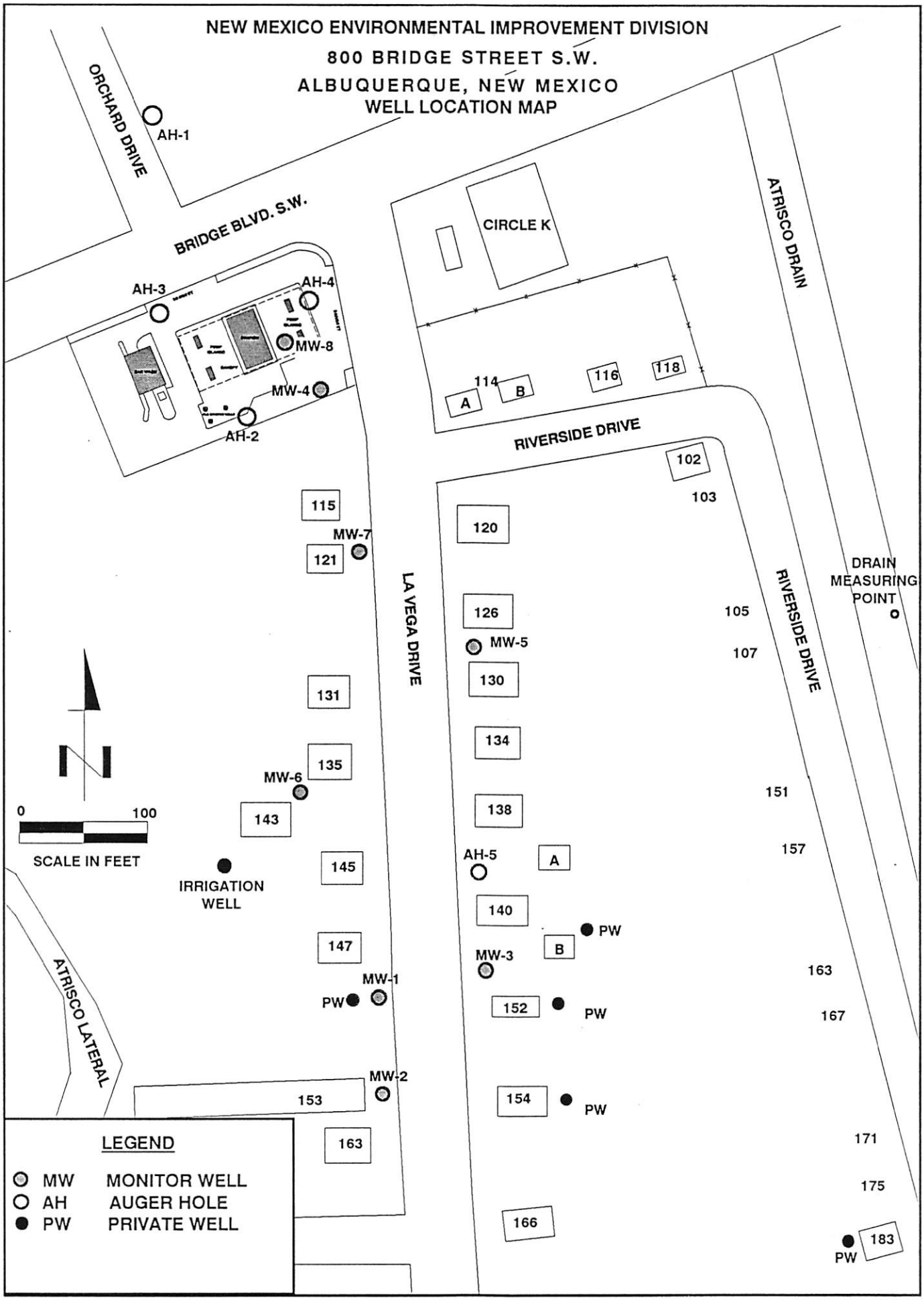
PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
Ocho Professional Building
423 Sixth Street - N.W.
Albuquerque, NM 87102
505-247-2000

DATE:

FIGURE 1

FIGURE 2



LEGGETTE, BRASHEARS & GRAHAM, INC.

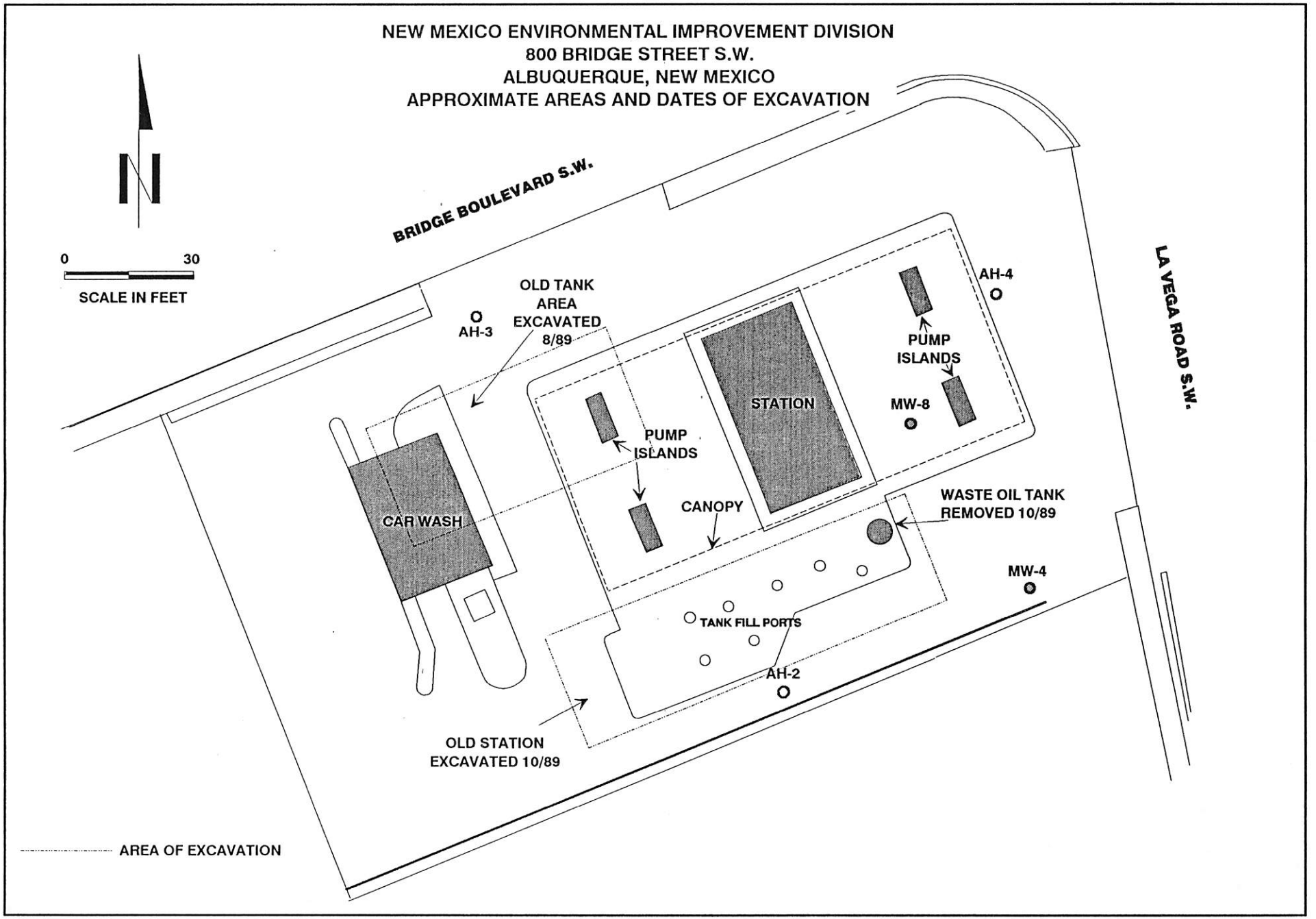
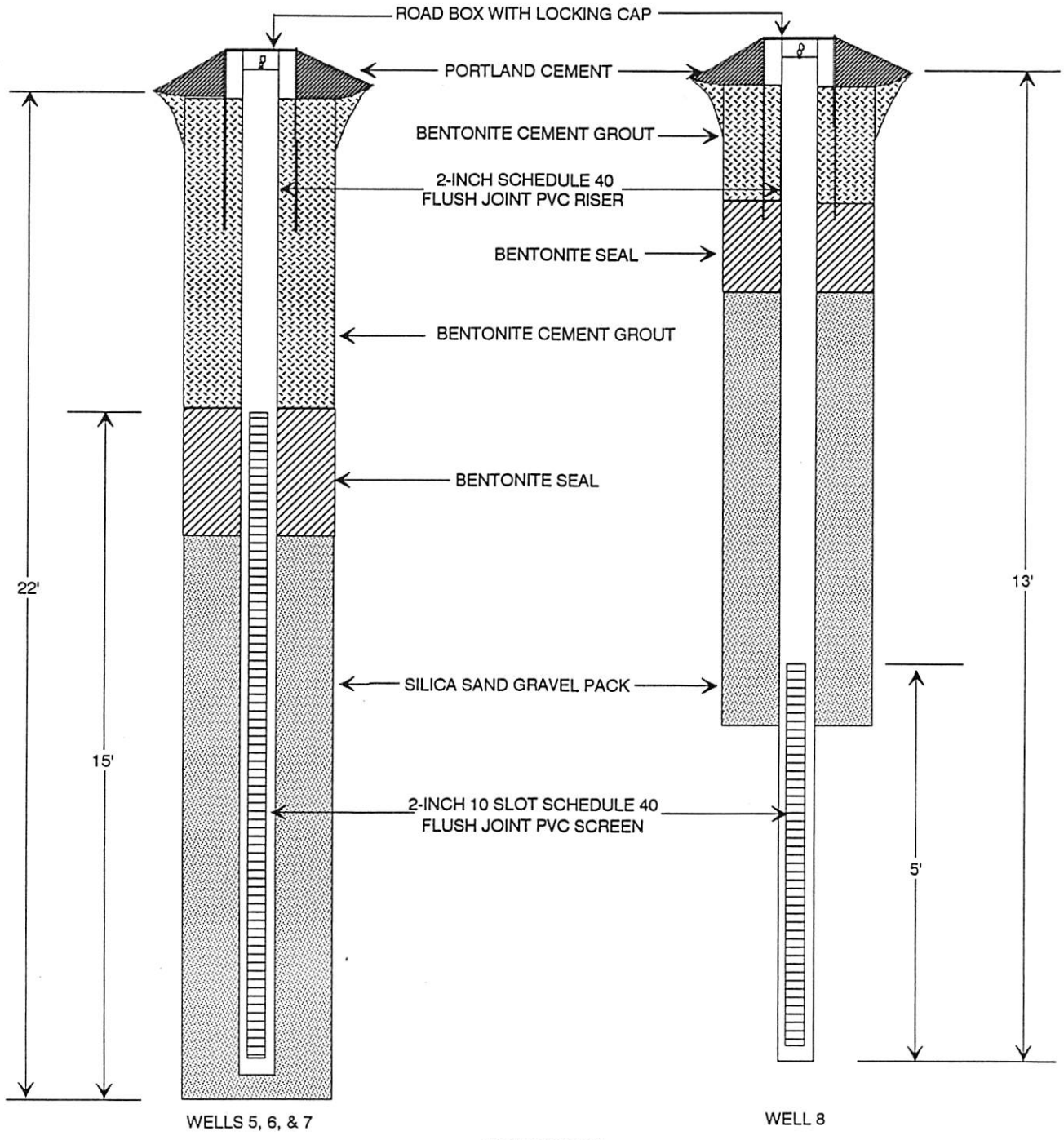


FIGURE 3

LEGGETTE, BRASHEARS & GRAHAM, INC.



NOT TO SCALE

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET SITE

GENERALIZED WELL CONSTRUCTION DIAGRAMS

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
Ocho Professional Building
423 Sixth Street - N.W.
Albuquerque, NM 87102
505-247-2000

DATE:

FIGURE 4

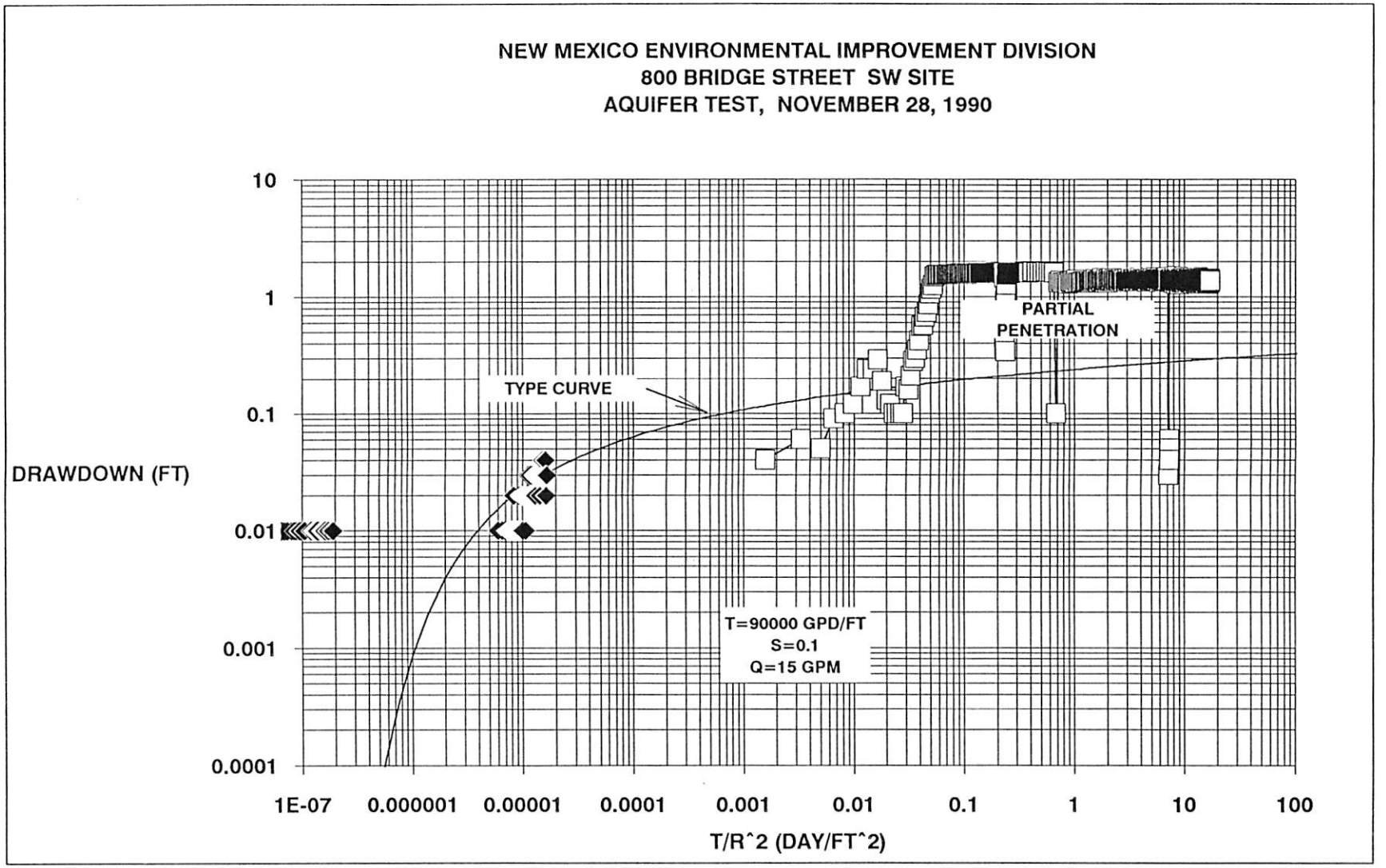

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET SW SITE
AQUIFER TEST, NOVEMBER 28, 1990
DRAWDOWN (FT)
10
1
0.1
0.01
0.001
0.0001
1E-07
0.000001
0.00001
0.0001
0.001
0.01
0.1
1
10
100
T/R^2 (DAY/FT^2)
TYPE CURVE
PARTIAL PENETRATION
T=90000 GPD/FT
S=0.1
Q=15 GPM

FIGURE 5

AQUIFER TEST, NOVEMBER 28, 1990
800 BRIDGE SW
RECOVERY, OBSERVATION WELL MW-1

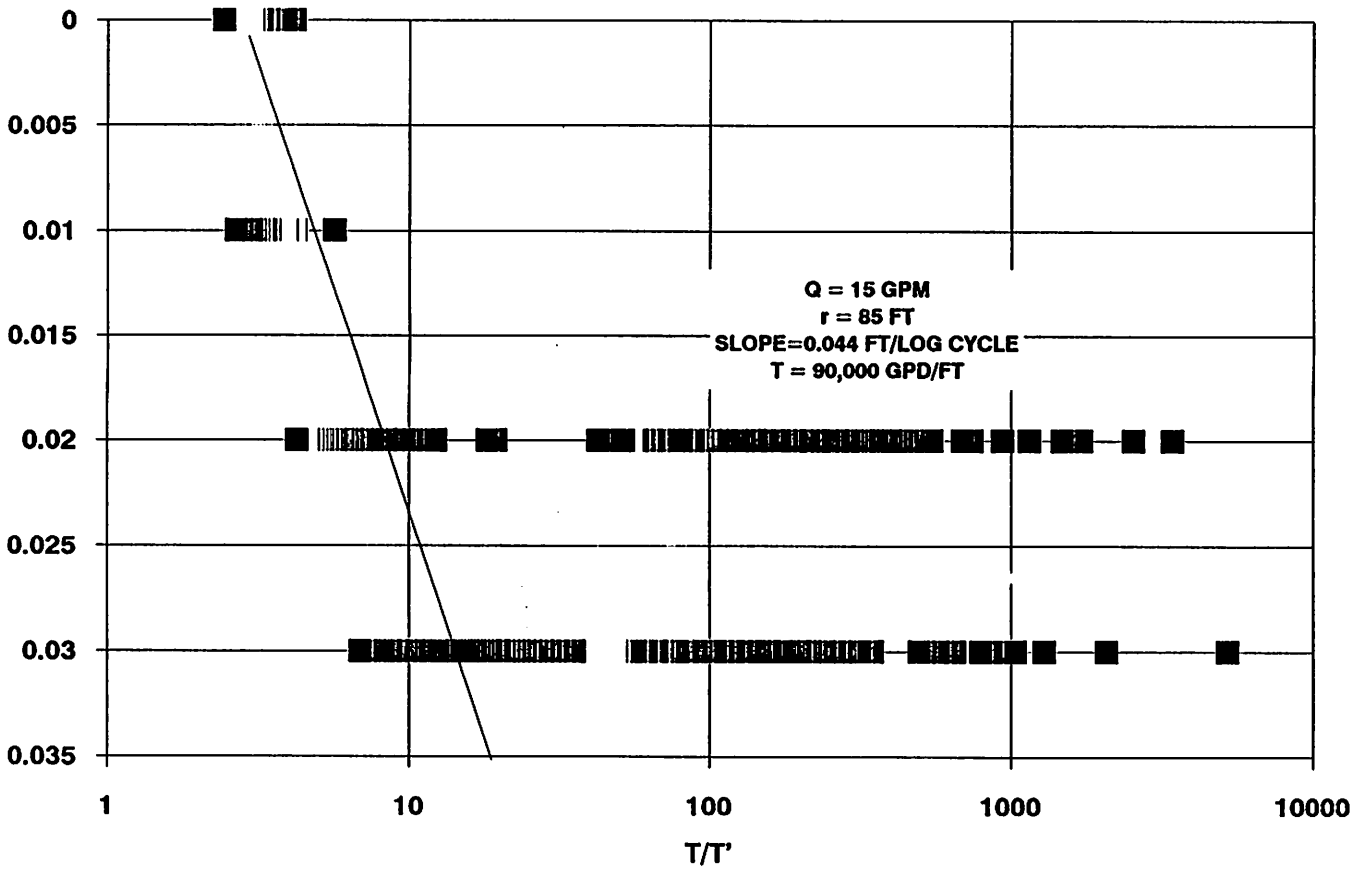


FIGURE 6

LEGGETTE, BRASHEARS & GRAHAM, INC.

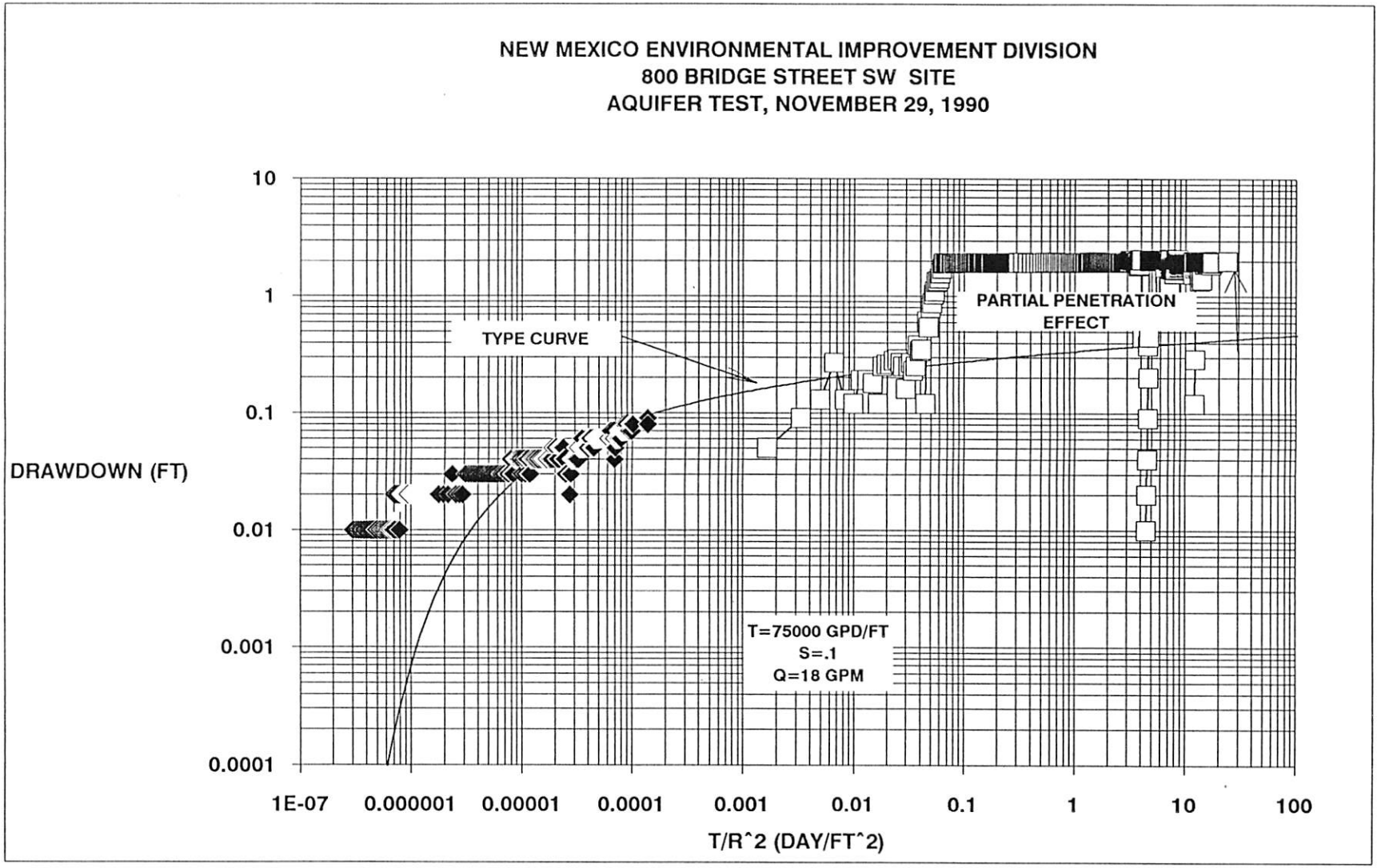

NEW MEXICO ENVIRONMENTAL IMPROVEMENT DIVISION
800 BRIDGE STREET SW SITE
AQUIFER TEST, NOVEMBER 29, 1990
DRAWDOWN (FT)
10
1
0.1
0.01
0.001
0.0001
TYPE CURVE
PARTIAL PENETRATION EFFECT
T=75000 GPD/FT
S=.1
Q=18 GPM
1E-07
0.000001
0.00001
0.0001
0.001
0.01
0.1
1
10
100
T/R^2 (DAY/FT^2)

FIGURE 7

AQUIFER TEST, NOVEMBER 29, 1990
800 BRIDGE SW
RECOVERY, OBSERVATION WELL MW-8

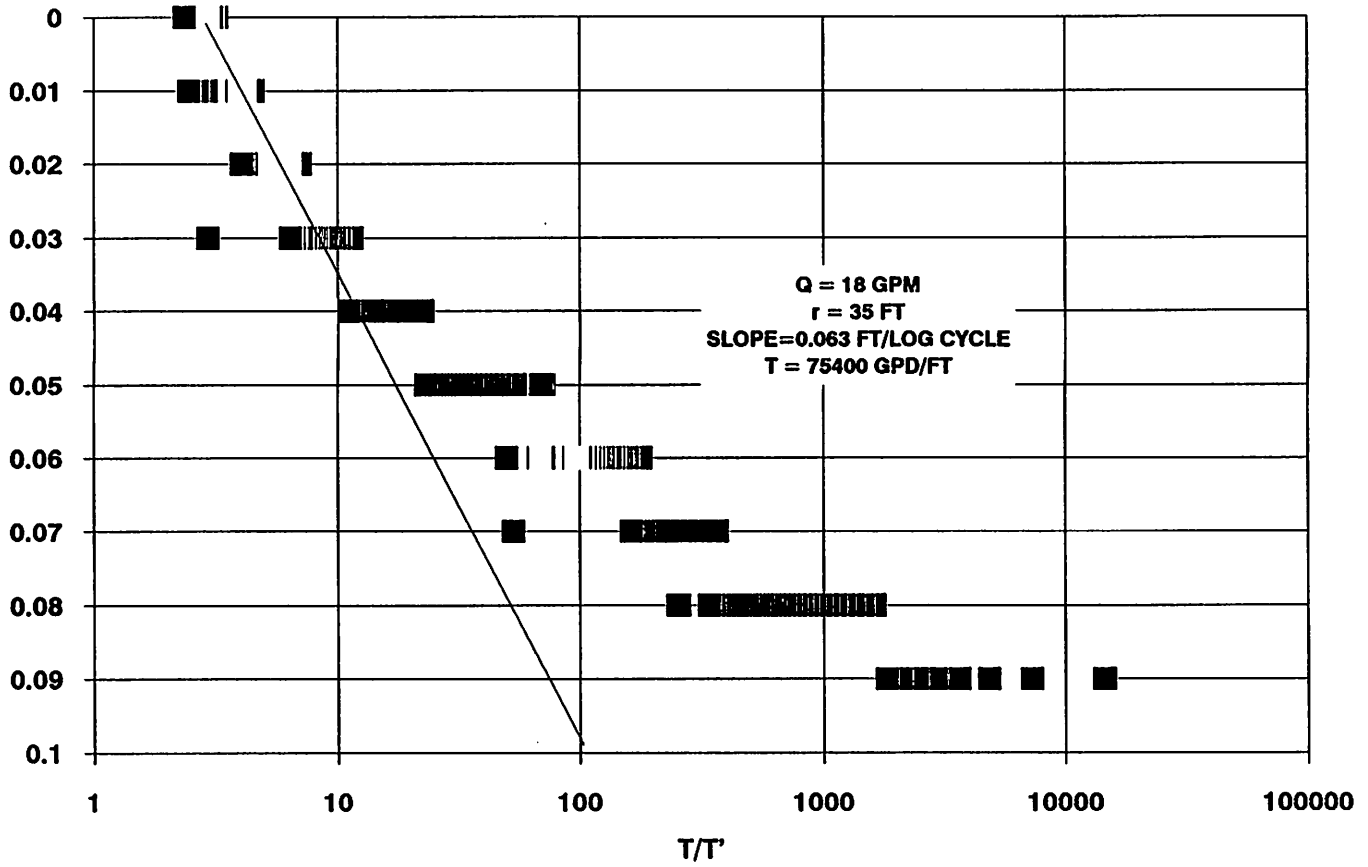


FIGURE 8

LEGGETTE, BRASHEARS & GRAHAM, INC.

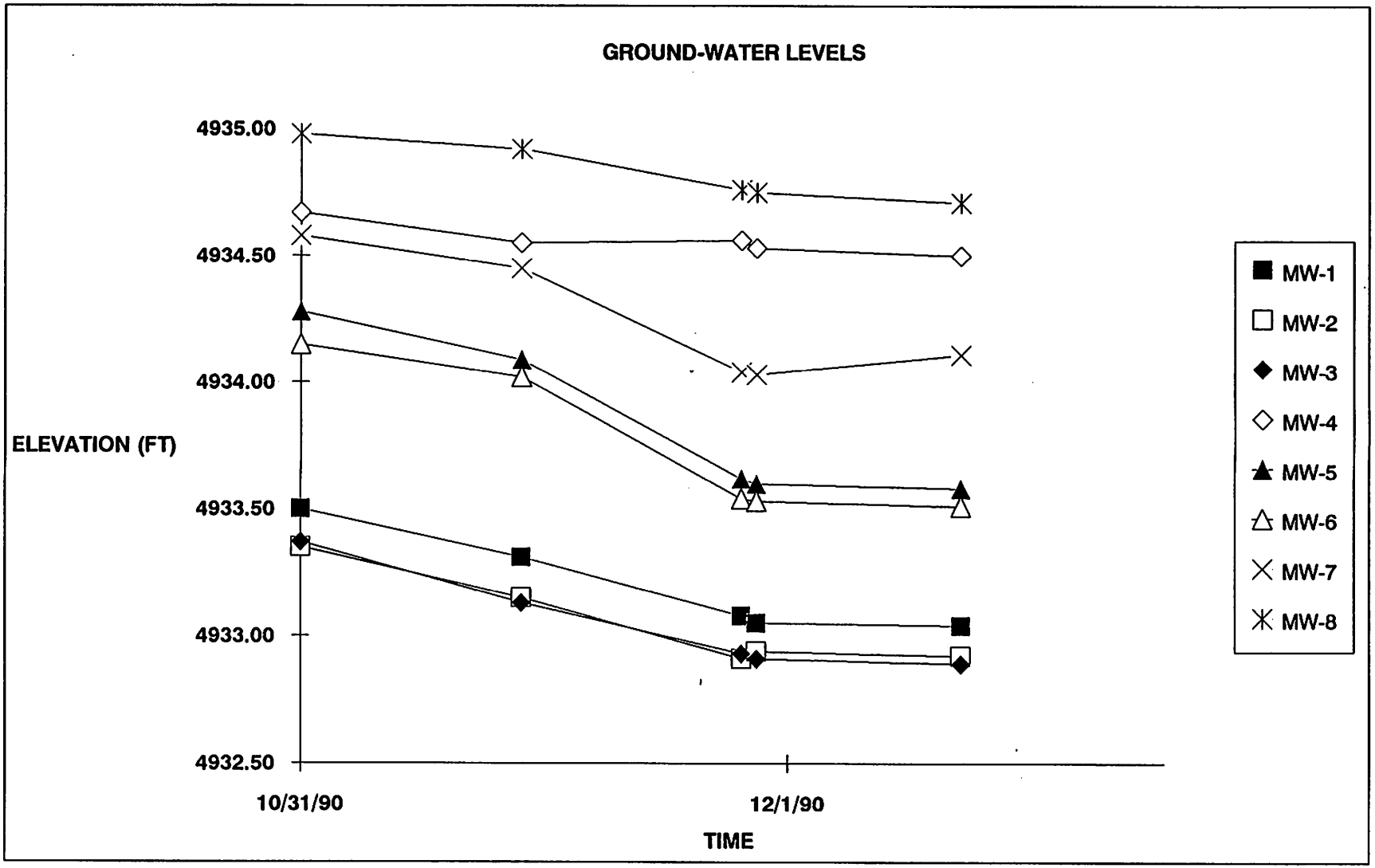
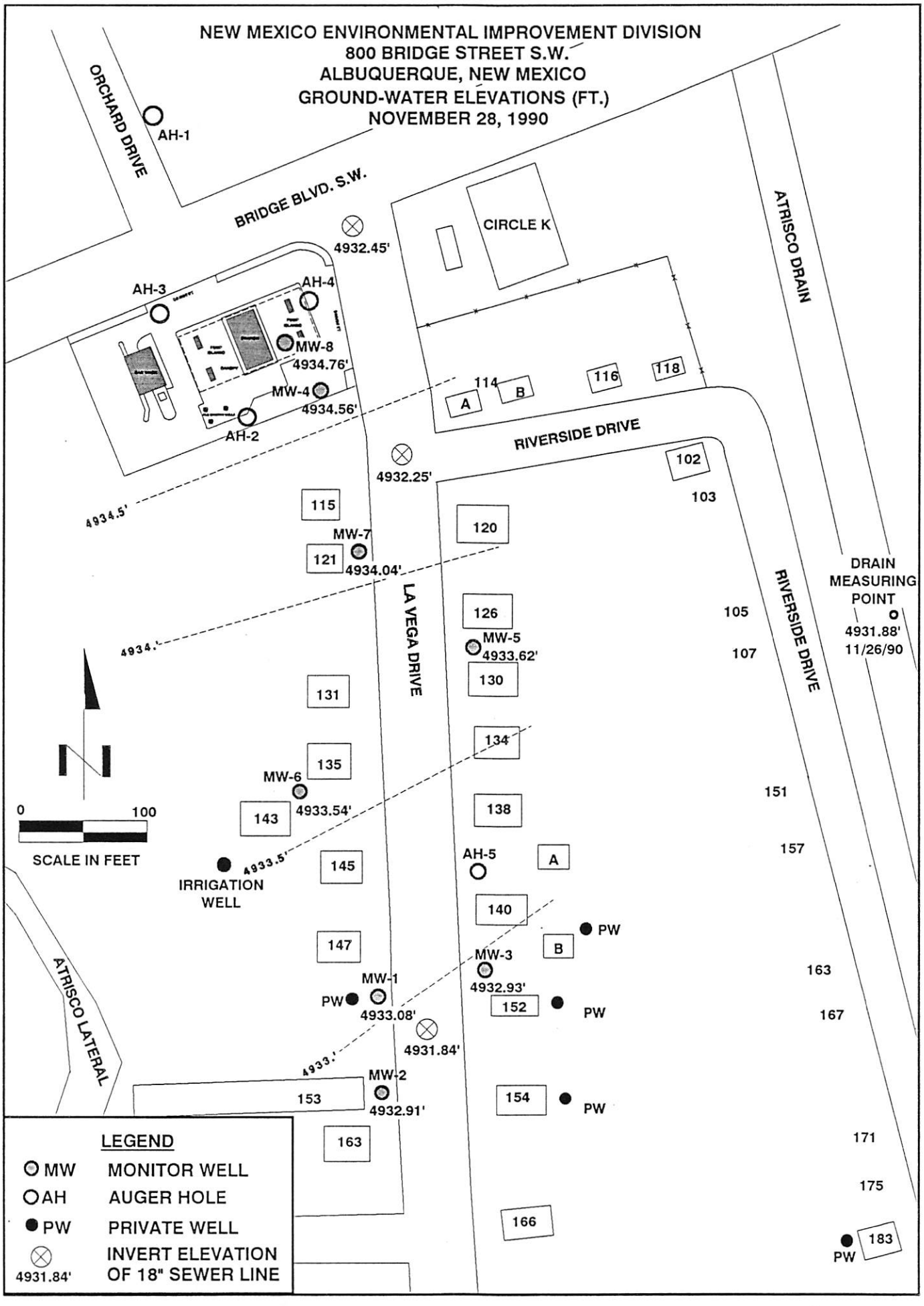

GROUND-WATER LEVELS
4935.00
4934.50
4934.00
4933.50
4933.00
4932.50
ELEVATION (FT)
10/31/90
12/1/90
TIME
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8

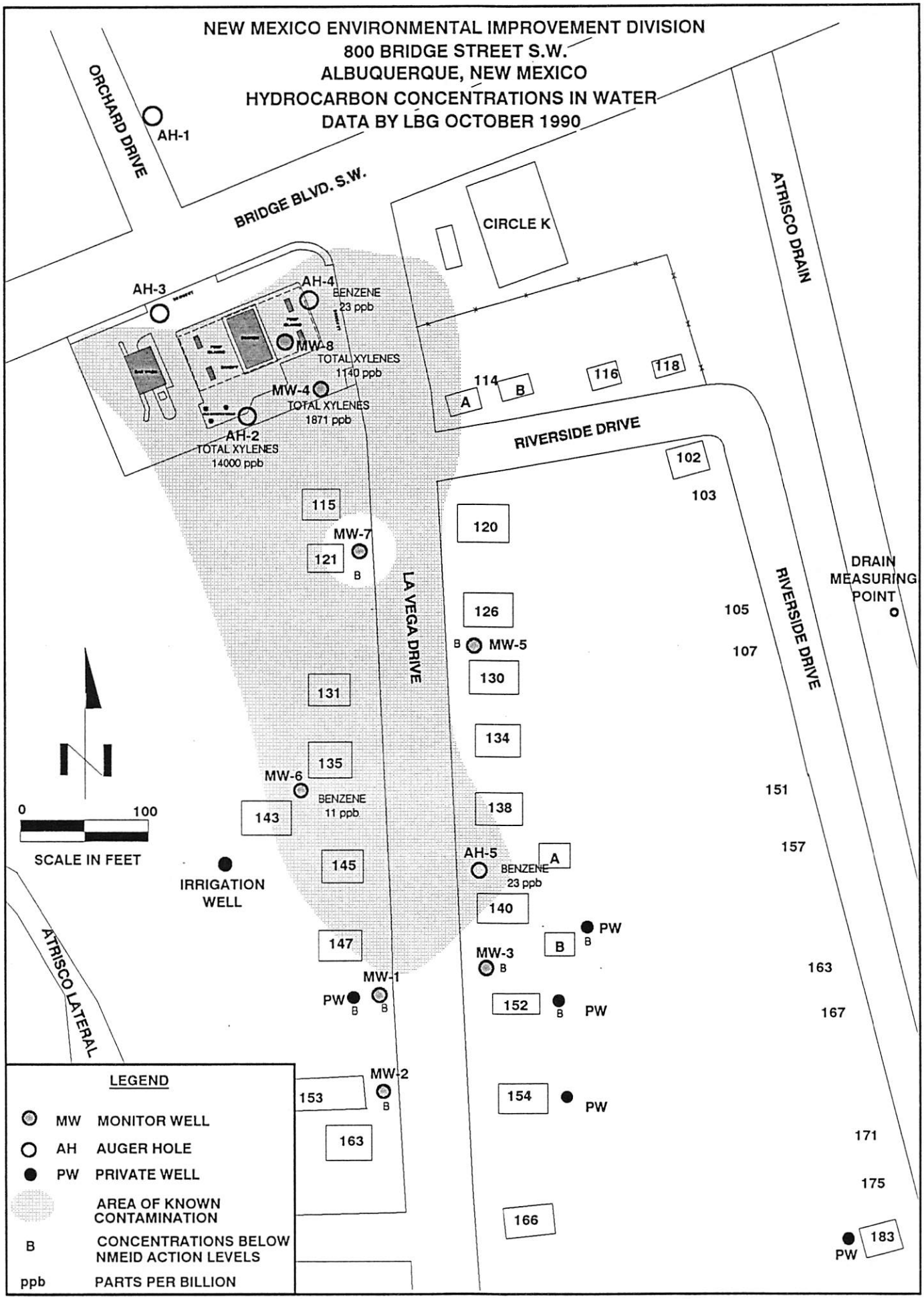
FIGURE 9

FIGURE 10



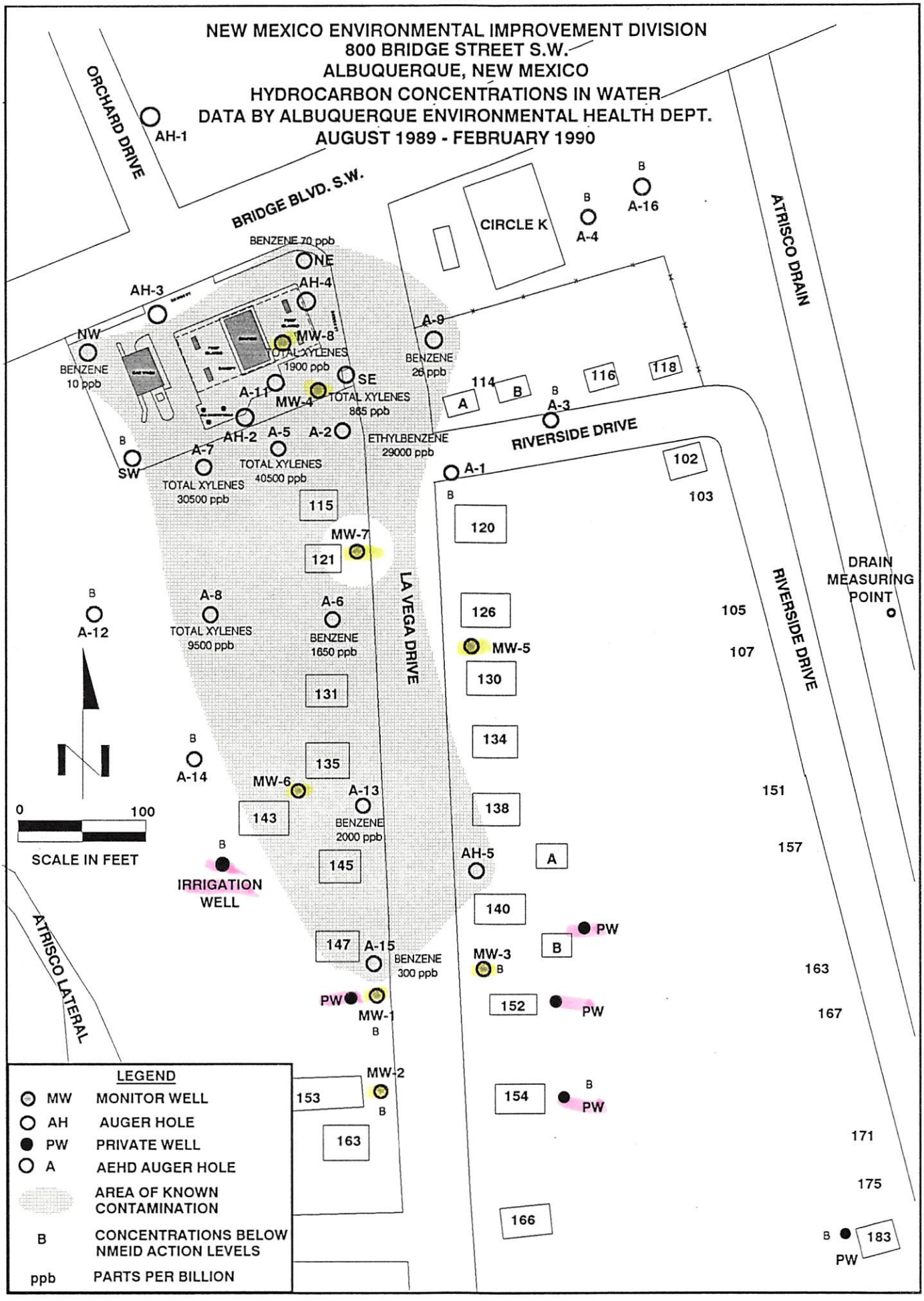
LEGGETTE, BRASHEARS & GRAHAM, INC.

FIGURE 11



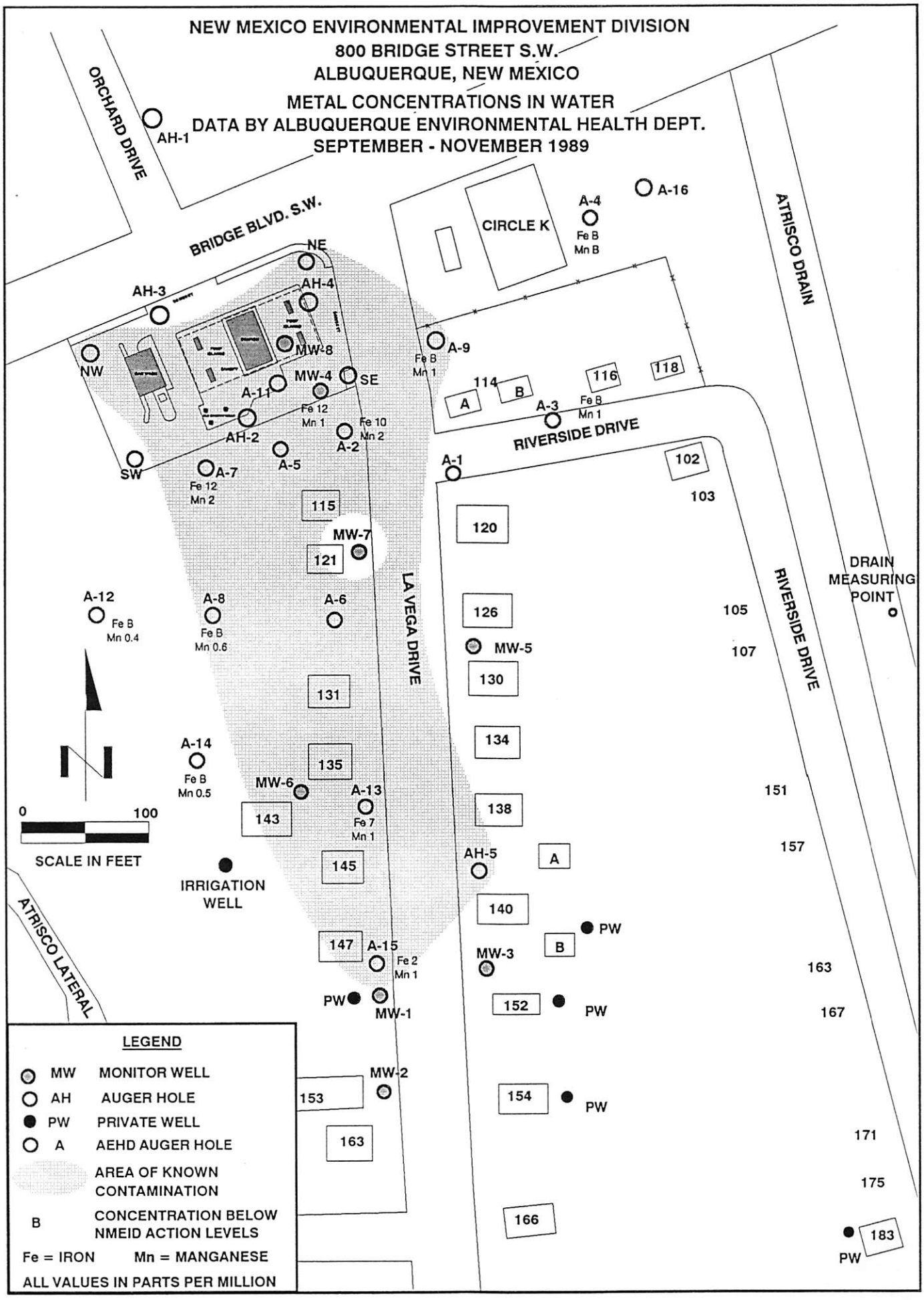
LEGGETTE, BRASHEARS & GRAHAM, INC.

FIGURE 12



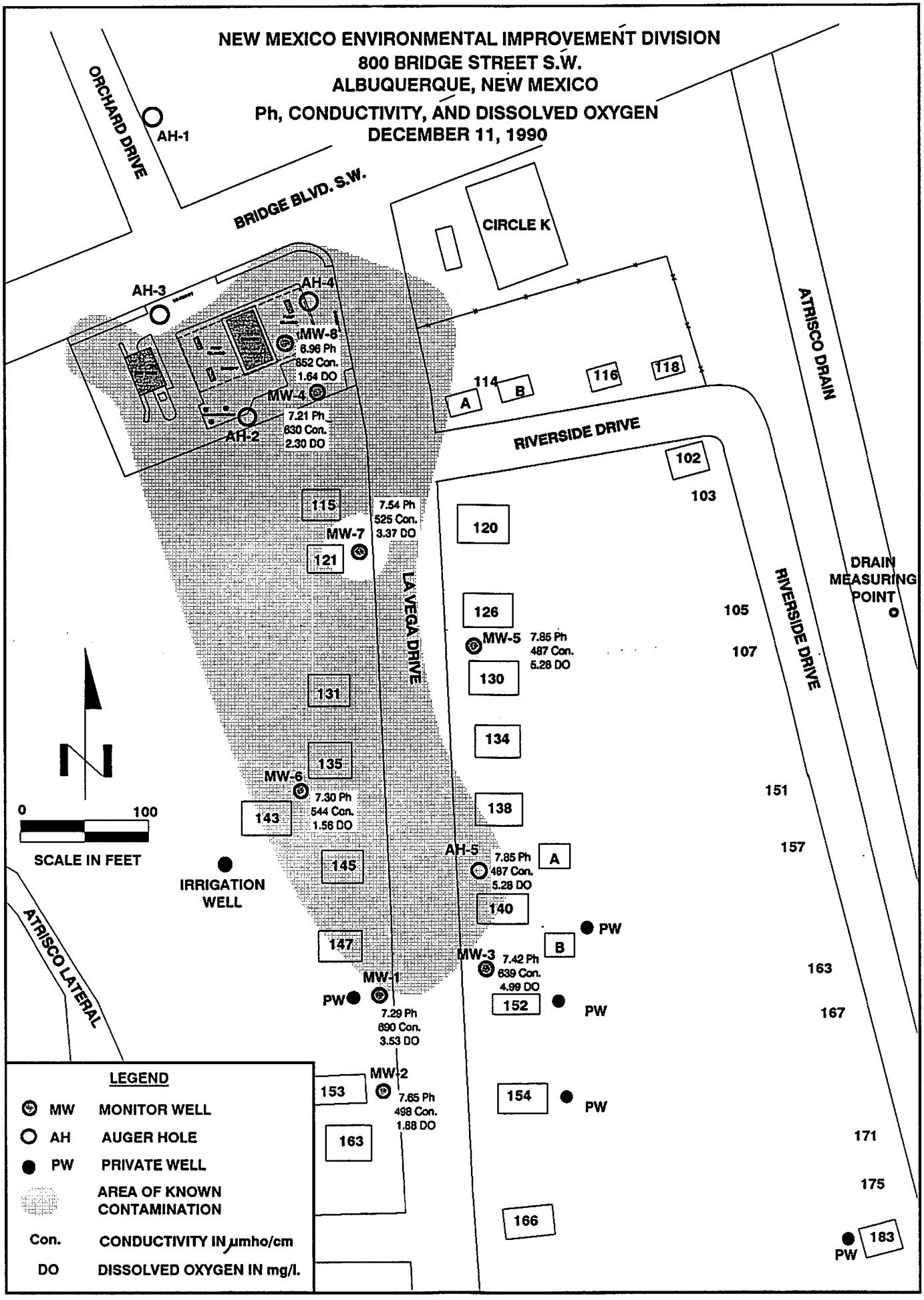
LEGGETTE, BRASHEARS & GRAHAM, INC.

FIGURE 13



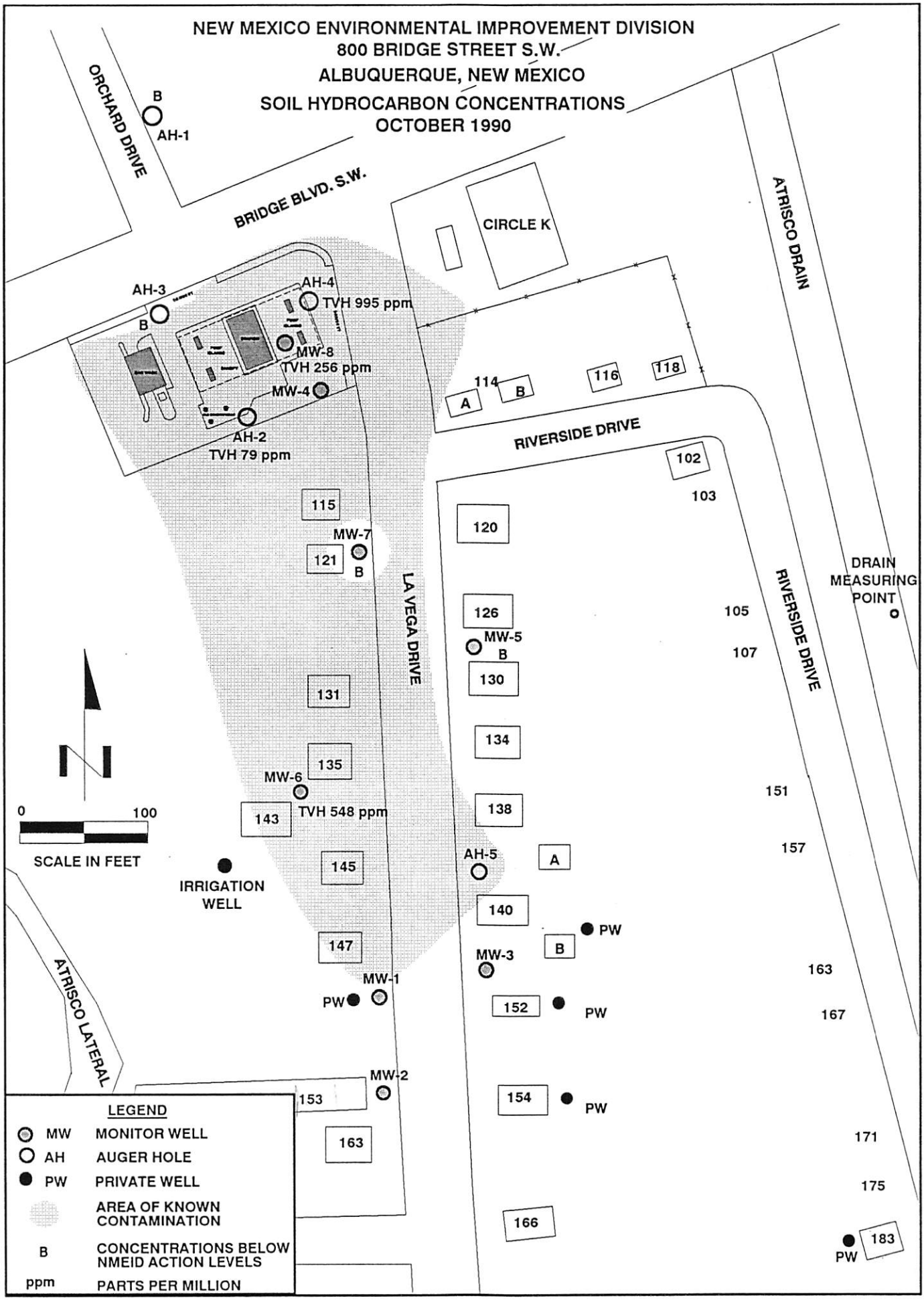
LEGGETTE, BRASHEARS & GRAHAM, INC.

FIGURE 14



LEGGETTE, BRASHEARS & GRAHAM, INC.

FIGURE 15



LEGGETTE, BRASHEARS & GRAHAM, INC.

APPENDIX

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER NMEID	
WELL NO. AH-1	Page 1 of 1 Pages
SCREEN TYPE	
DIAMETER	SLOT NO.
LOCATION Bridge & LaVega	SETTING
DATE COMPLETED 10/15/90	SAND PACK
DRILLING COMPANY Rogers	CASING
DRILLING METHOD Hollow Stem Auger	SETTING
SAMPLING METHOD	DEVELOPMENT
OBSERVER LA Hohweiler	DURATION
REFERENCE POINT (RP)	STATIC WATER LEVEL DTW 9.24
ELEVATION OF RP	YIELD

REMARKS
Water ph 7.98, conduct. 750 (Water sampled from temporary casing)

DEPTH (feet) FROM	TO	DESCRIPTION
0	2"	Asphalt
2"	3'	Sand, med-fine grain, brown, minor gravel
3'	5'	SPOON SAMPLE, 1 ft. recovery TVH: 620ppm(HNu), 0.1ppm (LAB)
		Sand, med-fine grain, brown, minor gravel
		some silt, trace coal
5'	8'	Sand, med-fine, brown, minor gravel
8'	10'	SPOON SAMPLE, 15" recovery TVH: 1.8ppm (HNu)
		Sand, med-coarse, brown, quartz rich
		TD-10'

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER NMEID	
WELL NO. AH-2	PAGE 1 OF 1 PAGES
SCREEN TYPE	
DIAMETER	SLOT NO.
LOCATION Bridge & LaVega	SETTING
DATE COMPLETED 10/15/90	SAND PACK
DRILLING COMPANY Rogers	CASING
DRILLING METHOD Hollow Stem Auger	SETTING
SAMPLING METHOD	DEVELOPMENT
OBSERVER LA Hohweiler	DURATION
REFERENCE POINT (RP)	STATIC WATER LEVEL DTW 10.02'
ELEVATION OF RP	YIELD

REMARKS Water ph 6.59, conduct. 880, redox -107 (Water sample bailed from temporary casing)

DEPTH (feet) FROM	TO	DESCRIPTION
0	2"	Asphalt
2"	.1'	Soil, brown, silty, moist
1'	3'	Sand, very fine to fine, brown, moist
3'	5'	SPOON SAMPLE, sand, med. grain, brow TVH: 5.2ppm (HNu)
		Clay, brown, lower 5"
5'	8'	Sand, fine grain to medium, brown, HC odor
8'	10'	SPOON SAMPLE TVH: 30ppm (HNu),79 ppm (LAB)
		6" sand,a coarse, brown, quartz rich, minor gravel
		2" black sand, minor gravel
		1' sand, coarse to very coarse, quartz rich, strong odor
		TD 12'

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER NMEID	
WELL NO. AH-3	Page 1 of 1 Pages
SCREEN TYPE	
DIAMETER	SLOT NO.
LOCATION Bridge & LaVega	SETTING
DATE COMPLETED 10/15/90	SAND PACK
DRILLING COMPANY Rogers	CASING
DRILLING METHOD Hollow Stem Auger	SETTING
SAMPLING METHOD	DEVELOPMENT
OBSERVER LA Hohweiler	DURATION
REFERENCE POINT (RP)	STATIC WATER LEVEL DTW 9.73'
ELEVATION OF RP	YIELD

REMARKS
Water ph 6.69, conduct. 733 (Water sampled from temporary casing)

DEPTH (feet) FROM	TO	DESCRIPTION
0	0.5'	Asphalt
0.5'	1'	Sand, brown, medium grain
1'	3'	Clay, dark brown, minor silt, slight odor
3'	5'	SPOON SAMPLE 1'8" recovery TVH: 60ppm (HNu)
		2" Clay, dark brown
		Sand, fine grain, brown
5'	7.5'	Sand, medium grain, brown
7.5'	8'	Sand, coarse, black, quartz rich
8'	10'	SPOON SAMPLE 1'4" recovery TVH: 180ppm(HNu), undetected (LAB)
		Sand, coarse, black, quartz rich, wet, HC odor

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER: NMEID	
WELL NO.: AH-4	Page 1 of 1 Pages
SCREEN TYPE	
DIAMETER	SLOT NO.
LOCATION: Bridge & LaVega	SETTING
DATE COMPLETED: 10/15/90	SAND PACK
DRILLING COMPANY: Rogers	CASING
DRILLING METHOD: Hollow Stem Auger	SETTING
SAMPLING METHOD	DEVELOPMENT
OBSERVER: LA Hohweiler	DURATION
REFERENCE POINT (RP)	STATIC WATER LEVEL: DTW 9.70'
ELEVATION OF RP	YIELD

REMARKS: Water ph 7.04, conduct. 901, redox 133 (Water sample balled from temporary casing)

DEPTH (feet) FROM	TO	DESCRIPTION
0	3"	Asphalt
3"	3'	Soil, black, some clay, gravel, cobbles,moist,
		strong odor
3'	5'	SPOON SAMPLE 20" recovery TVH: 220ppm (HNu)
		Sand, very fine grain, brown, silty, moist, odor
		3" clay
		4" sand, medium grain, light brown, quartz rich
5'	8'	Sand, medium grain, light brown HC odor
8'	10'	SPOON SAMPLE 1.5' recovery TVH: 300ppm (HNu),995ppm (LAB)
		8" sand, coarse, light brown, quartz rich, HE odor
		10" sand, as above, wet, odor
10'	12'	Sand, as above

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER: NMEID

WELL NO.: AH-5

SCREEN TYPE

DIAMETER

SLOT NO.

LOCATION: 140 LeVega

SETTING

DATE COMPLETED: 10/16/90

SAND PACK

DRILLING COMPANY: Rogers

CASING

DRILLING METHOD: Hollow Stem Auger

SETTING

SAMPLING METHOD

DEVELOPMENT

OBSERVER: LA Hohweiler

DURATION

REFERENCE POINT (RP)

STATIC WATER LEVEL: DTW 8.91'

ELEVATION OF RP

YIELD

REMARKS

DEPTH (feet) FROM	TO	DESCRIPTION
0	1'	Sand, fine to medium, brown, minor gravel, cobbles
1'	3'	Clay, brown, minor sand, gravel
3'	5'	SPOON SAMPLE 20" recovery
		2" Clay, brown
		18" Sand, fine to medium, tan, upper 3" moist
5'	8'	Silty sand, fine grain, light brown, slight odor
8'	10'	SPOON SAMPLE 16" recovery TVH: 0.5ppm(LAB)
		12" quartz sand, coarse, brown, some gravel
		Slight HC odor
		4" quartz sand, very coarse, gravel

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER: NMEID	
WELL NO.: MW-5	
SCREEN TYPE: slotted PVC	
DIAMETER: 2"	SLOT NO.: 10
LOCATION: Bridge & LaVega	SETTING: 7 - 22'
DATE COMPLETED: 10/16/90	SAND PACK: 4.5 - 22'
DRILLING COMPANY: Rogers	CASING: PVC 2"
DRILLING METHOD: Hollow Stem Auger	SETTING: 4920.09 to 4942.09
SAMPLING METHOD	DEVELOPMENT
OBSERVER: LA Hohweiler	DURATION
REFERENCE POINT (RP): top of casing	STATIC WATER LEVEL: 4933.09
ELEVATION OF RP: 4942.09	YIELD
REMARKS	

DEPTH (feet) FROM	TO	DESCRIPTION
0	1'	Sand, fine grain, brown, gravel
1'	3'	Clay, brown, minor silt
3'	5'	SPOON SAMPLE 20" recovery
		4" clay, brown, minor silt, grades to silt then sand (10")
		6" sand, fine grain, tan
5'	7'	Sand, medium coarse, tan, some quartz, moist
7'	8'	Sand, medium-fine, dark brown, moist, HC odor
8'	10'	SPOON SAMPLE 17" recovery TVH: undetected (LAB)
		Sand, coarse to very coarse, dark brown, gravel, wet, odor
		Middle 5" medium grain
		Lower 7" black stained
10'	15'	Sand, coarse to very coarse, black, wet, slight odor

OWNER

NMEID

WELL NO. MW-5

DEPTH (FEET) FROM	TO	DESCRIPTION
15'	20'	Sand, fine to medium, dark brown, wet, slight odor
		TD - 21.5'

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER NMEID	
WELL NO. MW-6	Page 1 of 2 Pages
SCREEN TYPE slotted PVC	
DIAMETER 2 Inches	SLOT NO. 10
LOCATION 145 LaVega	SETTING 7 - 22'
DATE COMPLETED 10/16/90	SAND PACK 5 - 22'
DRILLING COMPANY Rogers	CASING 2" PVC
DRILLING METHOD Hollow Stem Auger	SETTING 4921.18 to 4943.18
SAMPLING METHOD	DEVELOPMENT
OBSERVER LA Hohweiler	DURATION
REFERENCE POINT (RP) top of casing	STATIC WATER LEVEL 4933.56
ELEVATION OF RP 4943.18	YIELD
REMARKS	

DEPTH (fe RO	TO	DESCRIPTION
0	1'	Sand, fine-medium, brown, some gravel
1'	3'	Clay, barown
3'	5'	SPOON SAMPLE 20" recovery TVH: 548ppm (LAB)
		8" clay, brown
		12" silty, clay, brown
5'	6'	Clay, brown
6'	8'	Sand, fine grain, tan, quartz rich, strong odor
8'	10'	SPOON SAMPLE 12" recovery
		Sand, coarse to very coarse, quartz rich, black stain, wet some gravel, strong odor
10'	13'	Sand, coarse, tan, quartz rich, wet, odor
13'	15'	Sand, coarse to very coarse, black stain, gravel, wet, strong odor
15'	22'	Sand, as above.

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER NMEID	
WELL NO. MW-7	
SCREEN TYPE slotted PVC	
DIAMETER 2 Inches	SLOT NO. 10
LOCATION Bridge & LaVega	SETTING 7-22'
DATE COMPLETED 10/18/90	SAND PACK 5 - 22'
DRILLING COMPANY Rogers	CASING 2" PVC
DRILLING METHOD Hollow Stem Auger	SETTING 4920.94 to 4942.94
SAMPLING METHOD	DEVELOPMENT
OBSERVER LA Hohweiler	DURATION
REFERENCE POINT (RP) top of casing	STATIC WATER LEVEL 4934.22
ELEVATION OF RP 4942.94'	YIELD
REMARKS	

DEPTH (fe RO	TO	DESCRIPTION
0	3'	Soil, brown, silty
3'	5'	SPOON SAMPLE 22" recovery TVH: 142ppm(HNu)
		12" sand, fine grain, tan, black stain, HC odor
		10" silty clay, brown
5'	8'	Sand, very fine to fine, black stain, HC odor
8'	10'	SPOON SAMPLE 20" recovery TVH: 600ppm(HNu), 10.6ppm (LAB)
		Sand, coarse, brown, quartz rich, wet
		black stain, strong odor
10'	13'	Sand, as above, coarse to very coarse, black stain,
		wet, strong odor
13'	15'	Sand, very coarse, black stain, wet HC odor
15'	22'	Sand, very coarse, quartz rich, gravel, wet, HC odor

GEOLOGIC LOG

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water Consultants
423 Sixth Street, N.W.
Albuquerque, New Mexico 87102
(505) 247-2000

OWNER: NMEID	
WELL NO.: MW-8	Page 1 of 1 Pages
SCREEN TYPE: slotted steel	
DIAMETER: 2"	SLOT NO.: 10
LOCATION: Fina station, Bridge & LaVega	SETTING: 8 - 13'
DATE COMPLETED: 10/18/90	SAND PACK: 2 - 9'
DRILLING COMPANY: Rogers	CASING: 2" galvanized steel
DRILLING METHOD: Hand Auger	SETTING: 4931.86' to 4944.57'
SAMPLING METHOD	DEVELOPMENT
OBSERVER: LA Hohweiler	DURATION
REFERENCE POINT (RP): top of casing	STATIC WATER LEVEL: 4935.66'
ELEVATION OF RP: 4944.57'	YIELD
REMARKS	

DEPTH (feet) FROM	TO	DESCRIPTION
0	2'	Concrete
2'	2.5'	Sand, medium grain, brown, HC odor
2.5'	5.5'	Clay, dark brown, black stain, strong odor TVH: 380ppm(HNu)
5.5'	9'	Sand, medium grain, black stain, quartz ri TVH: 520ppm(HNu), 256ppm(LAB)
		strong odor
		TD - 13'

Form WR-23

STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

San Jose #8-3 ~~51~~

Section 1

(Plat of 640 acres)

(A) Owner of well City of Albuquerque

Street and Number City Hall

City Albuquerque State New Mexico

Well was drilled under Permit No. ______ and is located in the NE ¼ SE ¼ SW ¼ of Section 29 Twp. 10-N Rge. 3-E

(B) Drilling Contractor Roscoe Moss Company License No. RE WD-36

Street and Number 4360 Worth Street

City Los Angeles State California.

Drilling was commenced October 7, 1963 19__

Drilling was completed October 21, 1963 19__

Elevation at top of casing in feet above sea level ______ Total depth of well 1200

State whether well is shallow or artesian ______ Depth to water upon completion ______

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	192	1032	840	Gravel with some clay - sand and clay streaks
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
32	90		0	32	32			
16	54		0	192	192 Blank casing			
16	54		192	1032	840 Perforated casing.			

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ______ License No. ______

Street and Number ______ City ______ State ______

Tons of Clay used ______ Tons of Roughage used ______ Type of roughage ______

Plugging method used ______ Date Plugged ______ 19__

Plugging approved by:

______
Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received STATE ENGINEER OFFICE 1964 JAN -9 AM 9:58

File No. RG-3203-X-6-~~3~~-4 Use Municipal Location No. 10N.3E.29 ~~341~~

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	10	10		Top soil
10	50	40		Sand
50	89	39		Gravel
89	120	31		Gravel with some sand
120	195	75		Sand
195	315	120		Gravel with some clay
315	620	305		Sand, gravel and rocks
620	950	330		Sand and clay streaks
950	1130	180		Clay, sandy clay with sand stks
1130	1200	70		Sandy clay with rocks and sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Roscoe Moss Company.

C. A. Jarvis
Well Driller

Secretary

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Mr. A . M. Thomas
Street and Number 1318 Bridge Blvd. S. W.
City Albuquerque State New Mexico
Well was drilled under Permit No. RG-795 and is located in the SW ¼ NW ¼ NW ¼ of Section 34 Twp. 10 N Rge. 3E
(B) Drilling Contractor Rodgers Water Wells License No. 225
Street and Number 1626 Beverly Rd. S. W.
City Albuquerque State New Mexico
Drilling was commenced May 17 1957
Drilling was completed May 17 1957

Elevation at top of casing in feet above sea level ________ Total depth of well 50 ft.
State whether well is shallow or artesian Shallow Depth to water upon completion 12 ft.

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
2" Galv. Pipe								

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

STATE ENGINEER OFFICE ALBUQUERQUE, N. M.
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JUN 4 1957

Section 5 PLUGGING RECORD

Name of Plugging Contractor ________ License No. ________
Street and Number ________ City ________ State ________
Tons of Clay used ________ Tons of Roughage used ________ Type of roughage ________
Plugging method used ________ Date Plugged ________ 19__
Plugging approved by:

____
Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received ________

File No. RG 795 Use Dom Location No. Map 41 Irc 60b NRGCD

LOG OF WELL

Depth in Feet		Thickness in Feet	Color	Type of Material Encountered
From	To			

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

____
Well Driller

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well City of Albuquerque Owner's Well No. _____

Street or Post Office Address _____

City and State Albuquerque, NM

Well was drilled under Permit No. RG-42018-S and is located in the:

a. _____ ¼ NW ¼ NE ¼ NE ¼ of Section 19 Township 10N Range 3E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____

Subdivision, recorded in Bernalillo County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Rodgers & Company License No. WD-225

Address 2615 Isleta Blvd., SW Albuquerque, NM 87105

Drilling Began 10/11/84 Completed 10/23/1984 Type tools _____ Size of hole _____ in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 287 ft.

Completed well is XXX shallow ☐ artesian. Depth to water upon completion of well 13'8" ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
30'	307'		Large Gravel, Clay, Sandy Clay with Sand Streaks, Sandy Clay with Packed Fine Sand Coarse Sand with Packed Fine Sand, Coarse Sand & Small Gravel, with Fine Sand & Sandy Clay, Coarse Sand, Clay with Sand Streaks, Clay with Imbeded Gravel, Red Clay, Fine Silty Sand with Clay	1000 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
14" OD			1'	267'	288'		50'	278'

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ALBUQUERQUE, N.M.

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 1/10/85

Quad _____ FWL _____ FSL _____

File No. RG-42018-S Use commercial Location No. 10N.3E.19.221 (Bern)

✓

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0'	3'		Sand
3'	39'		Clay with Embeded Gravel
39'	62'		Large Gravel
62'	86'		Clay
86'	96'		Sandy Clay with Sand Streaks
96'	100'		Clay
100'	126'		Sandy Clay with Sand Streaks
126'	131'		Sandy Clay with Packed Fine Sand
131'	142'		Coarse Sand with Packed Fine Sand
142'	152'		Coarse Sand & Samll Gravel
152'	157'		Coarse Sand & Samll Gravel with Fine Sand & Sandy Clay
157'	162'		Coarse Sand
162'	172'		Clay with Sand Streaks
172'	177'		Clay
177'	187'		Sandy Clay with Sand Streaks
187'	202'		Coarse Sand & Small fravel
202'	206'		Clay with Embeded Gravel
206'	217'		Coarse Sand & Small Gravel
217'	223'		Sandy Clay with Sand Streaks
223'	227'		Red Clay
227'	247'		Sandy Clay with Fine Sand
247'	262'		Coarse Sand & Small fravel
262'	267'		Clay with Sand Streaks
267'	277'		Coarse Sand
277'	307'		Fine Silty Sand with Clay

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well City of Albuquerque Owner's Well No. _____

Street or Post Office Address _____

City and State Albuquerque, NM

Well was drilled under Permit No. RG-42018 and is located in the:

a. _____ ¼ NW ¼ NE ¼ NE ¼ of Section 19 Township 10N Range 3E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in Bernalillo County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Rodgers & Company License No. WD-225

Address 2615 Isleta Blvd., SW Albuquerque, NM 87105

Drilling Began 9/18/84 Completed 10/5/84 Type tools _____ Size of hole _____ in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 272½' ft.

Completed well is XXX shallow ☐ artesian. Depth to water upon completion of well 11'11" ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
3'	262'		Clay, lrg gravel w/ clay streaks, coarse sand, sand, small gravel, Clay w/ sand streaks, fine packed sand, sandy clay w/ sand streaks, sandy clay w/ packed	1000 GPM
				fine sand

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
14½" OD			2'	272½'	274½'		51'	263½'

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

STATE ENGINEER OFFICE
DISTRICT II
ALBUQUERQUE, N. MEX.
85 JAN 10 AM 11 27

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received 1/10/85

Quad _____ FWL _____ FSL _____

File No. RG-42018 Use commerical Location No. 10N.3E.19.221 (Bern)

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0'	3'		Clay
3	67'		Large Gravel with Clay Streaks
67'	72'		Clay
72'	75'		Coarse Sand
75'	78'		Clay
78'	80'		Sand
80'	92'		Small Gravel
92'	100'		Clay
100'	105'		Clay with Sand Streaks
105'	110'		Fine Packed Sand
110'	123'		Coarse Sand with "Caleche"
123'	125'		Clay
125'	131'		Fine Sand
131'	169'		Coarse Sand and Small Gravel
169'	191'		Sandy Clay with Sand Streaks
191'	212'		Coarse Sand and Small Gravel
212'	217'		Coarse Sand & Small Gravel with Clay stringers
217'	222'		Clay
222'	252'		Sandy Clay with Packed Fine Sand
252'	262'		Coarse Sand & Small Gravel
262'	307'		Sandy Clay with Packed Fine Sand

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when a well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be

EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: 140 LA VEGA		
Lab Sample #	: X27017	Client Project #	: NMEID/NMBRID
Date Sampled	: 10/05/90	Lab Project #	: 9290
Date Received	: 10/06/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/10/90	Method	: 8020
Date Analyzed	: 10/10/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8366
Methanol extract?	: No	Method Blank No.	: MB10/10/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 102%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: 152 LA VEGA		
Lab Sample #	: X27018	Client Project #	: NMEID/NMBRID
Date Sampled	: 10/05/90	Lab Project #	: 9290
Date Received	: 10/06/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/10/90	Method	: 8020
Date Analyzed	: 10/10/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8367
Methanol extract?	: No	Method Blank No.	: MB10/10/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 86%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved:

Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: TRIP BLANK		
Lab Sample #	: X27019	Client Project #	: NMEID/NMBRID
Date Sampled	: 10/05/90	Lab Project #	: 9290
Date Received	: 10/06/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/10/90	Method	: 8020
Date Analyzed	: 10/10/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8368
Methanol extract?	: No	Method Blank No.	: MB10/10/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 88%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved:

Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX Data Report
Method Blank Report

Method Blank Number	: MB10/10/90	Client Project No.	: NMEID/NMBRID
Date Extracted/Prepared	: 10/10/90	Lab Project No.	: 9290
Date Analyzed	: 10/10/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID8342

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7	0.6		---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 113%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield, Wheat Ridge, CO 80033

TOTAL VOLATILE HYDROCARBONS (TVH)
BY 5030/Modified 8015(Purge & Trap)

Client: Leggette, Brashears & Graham
Client Project No.: NMEID/NMBRID
Laboratory Project No.: 9290
Date of Report: October 15, 1990

Evergreen Sample #	Client Sample #	(TVH) ppm	MDL* ppm
x27017	140 LA VEGA	U	0.1
x27018	152 LA VEGA	U	0.1
x27019	Trip Blank	U	0.1

Qualifiers

U= TVH analyzed for but not detected
B= TVH found in blanks as well as sample (blank data should be compared).
*=MDL Method Detection Limit

Approved _____ QAO _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: AH-1		
Lab Sample #	: X27345	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
Date Analyzed	: 10/19/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5857
Methanol extract?	: No	Method Blank No.	: MB10/19/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	4
Toluene	108-88-3	3	J	4
Ethyl Benzene	100-41-4	1.2	J	4
Total Xylenes	1330-20-7	12		---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 62%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: AH-2		
Lab Sample #	: X27346	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 125.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5900
Methanol extract?	: Yes	Method Blank No.	: MEB10/22/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	500
Toluene	108-88-3		U	500
Ethyl Benzene	100-41-4	160	J	500
Total Xylenes	1330-20-7	1,100	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 88%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: W. Blasch

Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: AH-3		
Lab Sample #	: X27347	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5885
Methanol extract?	: No	Method Blank No.	: MB10/22/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2	1	J	4
Toluene	108-88-3	58	B	4
Ethyl Benzene	100-41-4	16		4
Total Xylenes	1330-20-7	140	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 91%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: W. Blasczyk

C M Smith
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: AH-4		
Lab Sample #	: X27348	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 125.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5887
Methanol extract?	: Yes	Method Blank No.	: MEB10/22/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	500
Toluene	108-88-3	1,300	B	500
Ethyl Benzene	100-41-4	7,900		500
Total Xylenes	1330-20-7	24,000	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 118%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: AH-5		
Lab Sample #	: X27349	Client Project #	: NMBRID
Date Sampled	: 10/16/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5893
Methanol extract?	: No	Method Blank No.	: MB10/22/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	4
Toluene	108-88-3	0.5	BJ	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7	4	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 97%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
Quality Assurance Officer

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: MW-5		
Lab Sample #	: X27350	Client Project #	: NMBRID
Date Sampled	: 10/16/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID5907
Methanol extract?	: No	Method Blank No.	: MB10/22/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	4
Toluene	108-88-3	6.3	B	4
Ethyl Benzene	100-41-4	1.9	J	4
Total Xylenes	1330-20-7	14	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 89%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: MW-6		
Lab Sample #	: X27351	Client Project #	: NMBRID
ate Sampled	: 10/16/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 5.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
ate Analyzed	: 10/22/90	Matrix	: Soil
ercent Loss on Drying	: NA	Lab File No.	: PID5906
Methanol extract?	: No	Method Blank No.	: MB10/22/90

ompound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	20
oluene	108-88-3	240	B	20
thyl Benzene	100-41-4	3,700	E	20
Total Xylenes	1330-20-7	15,000	BE	---

High surrogate recovery is probably due to coeluting peaks.

urrogate Recoveries;
a,a,a-Trifluorotoluene 158%

JALIFIERS:
= Extrapolated value.
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
= The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: AH-1		
Lab Sample #	: X27356	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
Date Analyzed	: 10/19/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8599
Methanol extract?	: No	Method Blank No.	: MB10/19/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2	2	J	4
Toluene	108-88-3	1.8	BJ	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 74%

QUALIFIERS:
U = Compound analyzed for, but not detected.
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B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: AH-2		
ab Sample #	: X27352	Client Project #	: NMBRID
ate Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 100.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
ate Analyzed	: 10/19/90	Matrix	: Water
ercent Loss on Drying	: NA	Lab File No.	: PID8593
Methanol extract?	: No	Method Blank No.	: MB10/19/90

ompound Name	Cas Number	Concentration ug/L		PQL* ug/L
enzene	71-43-2	2,600		400
oluene	108-88-3	1,400	B	400
thyl Benzene	100-41-4	1,900		400
Total Xylenes	1330-20-7	14,000		---
TBE	1634-04-4		U	600

urrogate Recoveries;
a,a,a-Trifluorotoluene 78%

QUALIFIERS:
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
= The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: AH-3		
Lab Sample #	: X27353	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
Date Analyzed	: 10/19/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8606
Methanol extract?	: No	Method Blank No.	: MB10/19/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2	1.5	J	4
Toluene	108-88-3	0.6	BJ	4
Ethyl Benzene	100-41-4	1.4	J	4
Total Xylenes	1330-20-7	0.8		---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 86%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: AH-4		
Lab Sample #	: X27354	Client Project #	: NMBRID
ate Sampled	: 10/15/90	Lab Project #	: 9389
ate Received	: 10/17/90	Dilution Factor	: 5.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
ate Analyzed	: 10/19/90	Matrix	: Water
ercent Loss on Drying	: NA	Lab File No.	: PID8607
Methanol extract?	: No	Method Blank No.	: MB10/19/90

ompound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2	23		20
oluene	108-88-3	18	BJ	20
thyl Benzene	100-41-4	150		20
Total Xylenes	1330-20-7	22		---
TBE	1634-04-4		U	30

urrogate Recoveries;
a,a,a-Trifluorotoluene 103%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: AH-5		
Lab Sample #	: X27355	Client Project #	: NMBRID
Date Sampled	: 10/16/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/22/90	Method	: 8020
Date Analyzed	: 10/22/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID5899
Methanol extract?	: No	Method Blank No.	: MB10/22/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2	23		4
Toluene	108-88-3	0.8	BJ	4
Ethyl Benzene	100-41-4	0.7	J	4
Total Xylenes	1330-20-7	1.7		---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 88%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: TRIP BLANK 10/15		
Lab Sample #	: X27357	Client Project #	: NMBRID
Date Sampled	: 10/15/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
Date Analyzed	: 10/19/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8600
Methanol extract?	: No	Method Blank No.	: MB10/19/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4	0.7	J	4
Total Xylenes	1330-20-7	3		---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 91%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
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(303)425-6021

BTEX/MTBE Data Report

Client Sample #	: TRIP BLANK 10/11		
Lab Sample #	: X27358	Client Project #	: NMBRID
Date Sampled	: 10/11/90	Lab Project #	: 9389
Date Received	: 10/17/90	Dilution Factor	: 1.000
Date Extracted/Prepared	: 10/19/90	Method	: 8020
Date Analyzed	: 10/19/90	Matrix	: Water
Percent Loss on Drying	: NA	Lab File No.	: PID8601
Methanol extract?	: No	Method Blank No.	: MB10/19/90

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3		U	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7	1.6		---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 91%

QUALIFIERS:
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX Data Report
Method Blank Report

Method Blank Number	: MB10/19/90	Client Project No.	: NMBRID
ate Extracted/Prepared	: 10/19/90	Lab Project No.	: 9389
ate Analyzed	: 10/19/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID5832

ompound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
oluene	108-88-3		U	4
thyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---

urrogate Recoveries;
a,a,a-Trifluorotoluene 108%

UALIFIERS:
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX/MTBE Data Report
Method Blank Report

Method Blank Number	: MB10/19/90	Client Project No.	: NMBRID
ate Extracted/Prepared	: 10/19/90	Lab Project No.	: 9389
ate Analyzed	: 10/19/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID8582

ompound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
oluene	108-88-3	0.9	J	4
thyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---
TBE	1634-04-4		U	6

urrogate Recoveries;
a,a,a-Trifluorotoluene 118%

UALIFIERS:
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX Data Report
Method Blank Report

Method Blank Number	: MEB10/22/90	Client Project No.	: NMBRID
Date Extracted/Prepared	: 10/22/90	Lab Project No.	: 9389
Date Analyzed	: 10/22/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID5884

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3	0.5	J	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7	0.8		---

Surrogate Recoveries;	
a,a,a-Trifluorotoluene	103%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX/MTBE Data Report
Method Blank Report

Method Blank Number	: MB10/22/90	Client Project No.	: NMBRID
Date Extracted/Prepared	: 10/22/90	Lab Project No.	: 9389
Date Analyzed	: 10/22/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID5882

Compound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
Toluene	108-88-3	0.5	J	4
Ethyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7		U	---
MTBE	1634-04-4		U	6

Surrogate Recoveries;
a,a,a-Trifluorotoluene 112%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield, Wheat Ridge, CO 80033

TOTAL VOLATILE HYDROCARBONS (TVH)
BY 5030/Modified 8015(Purge & Trap)

Client: Leggette, Brashears & Graham
Client Project No.: NMBRID
Laboratory Project No.: 9389
Date of Report: October 19, 1990

Evergreen Sample #	Client Sample #	(TVH) ppm	MDL* ppm
x27345	AH-1 Soil	0.1	0.1
x27346	AH-2 Soil	79.0	5.0
x27347	AH-3 Soil	U	0.1
x27348	AH-4 Soil	995	5.0
x27349	AH-5 Soil	0.5	0.1
x27350	MW-5 Soil	U	0.1
x27351	MW-6 Soil	548	5.0
x27352	AH-2 Water	73.6	10.0
x27353	AH-3 Water	1.0	0.1
x27354	AH-4 Water	15.7	2.0
x27355	AH-5 Water	1.0	0.1
x27356	AH-1 Water	U	0.1
x27357	Trip Blk. 10/15	U	0.1
x27358	Trip Blk. 10/11	U	0.1

Qualifiers

U= TVH analyzed for but not detected
B= TVH found in blanks as well as sample (blank data should be compared).
*=MDL Method Detection Limit

Approved Steven W. Yee QAO

EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: MW 7		
Lab Sample #	: X27467	Client Project #	: NMEID/NMBRID
Date Sampled	: 10/18/90	Lab Project #	: 9427
Date Received	: 10/19/90	Dilution Factor	: 125.000
Date Extracted/Prepared	: 10/24/90	Method	: 8020
Date Analyzed	: 10/24/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID8754
Methanol extract?	: Yes	Method Blank No.	: MEB10/24/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	500
Toluene	108-88-3	160	J	500
Ethyl Benzene	100-41-4	210	J	500
Total Xylenes	1330-20-7	1,700	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 83%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021

BTEX Data Report

Client Sample #	: MW 8		
Lab Sample #	: X27468	Client Project #	: NMEID/NMBRID
Date Sampled	: 10/18/90	Lab Project #	: 9427
Date Received	: 10/19/90	Dilution Factor	: 125.000
Date Extracted/Prepared	: 10/24/90	Method	: 8020
Date Analyzed	: 10/24/90	Matrix	: Soil
Percent Loss on Drying	: NA	Lab File No.	: PID8755
Methanol extract?	: Yes	Method Blank No.	: MEB10/24/90

Compound Name	Cas Number	Concentration ug/Kg		PQL* ug/Kg
Benzene	71-43-2		U	500
Toluene	108-88-3	140	J	500
Ethyl Benzene	100-41-4	1,600		500
Total Xylenes	1330-20-7	3,300	B	---

Surrogate Recoveries;
a,a,a-Trifluorotoluene 80%

QUALIFIERS:
U = Compound analyzed for, but not detected.
J = Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

Approved: _____ _____
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EVERGREEN ANALYTICAL, INC.
4036 Youngfield St. Wheat Ridge, CO 80033
(303)425-6021
BTEX Data Report
Method Blank Report

Method Blank Number	: MEB10/24/90	Client Project No.	: NMEID/NMBRID
ate Extracted/Prepared	: 10/24/90	Lab Project No.	: 9427
ate Analyzed	: 10/24/90	Dilution Factor	: 1.000
		Method	: 8020
		Matrix	: Water
		Lab File No.	: PID8747

ompound Name	Cas Number	Concentration ug/L		PQL* ug/L
Benzene	71-43-2		U	4
oluene	108-88-3		U	4
thyl Benzene	100-41-4		U	4
Total Xylenes	1330-20-7	0.6		---

urrogate Recoveries;
a,a,a-Trifluorotoluene 101%

UALIFIERS:
U = Compound analyzed for, but not detected.
= Indicates an estimated value when the compound is detected, but is below the CLP Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
* = The Practical Quantitation Limit is equal to the dilution factor multiplied by ten times the Method Detection Limit as determined by EPA SW846, Vol. 1B, Part II, pa. 8000-14.
NA = Not applicable or not available.

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EVERGREEN ANALYTICAL, INC.
4036 Youngfield, Wheat Ridge, CO 80033

TOTAL VOLATILE HYDROCARBONS (TVH)
BY 5030/Modified 8015(Purge & Trap)

Client: Leggette, Brashears & Graham
Client Project No.: NMEID/NMBRID
Laboratory Project No.: 9427
Date of Report: October 24, 1990

Evergreen Sample #	Client Sample #	(TVH) ppm	MDL* ppm
x27467	MW 7	10.6	0.1
x27468	MW 8	256	2.5

Qualifiers

U= TVH analyzed for but not detected
B= TVH found in blanks as well as sample (blank data should be compared).
*=MDL Method Detection Limit

Approved _____ QAO _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-1		
Lab Sample Number	: X27973	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
Date Analyzed	: 11/07/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4493
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2	2.6		2
Toluene	108-88-3	0.5	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.7		2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	108%

Qualifiers:

^^ = Total Volatile Hydrocarbons is calculated from a total response from the approximate boiling range of (-)10 to 200 degrees C. The concentrations of BTEX are included in the TVH value.
U = Compound analyzed for, but not detected above the reporting limit(0.2 ppb) Reporting limits are roughly the method detection limits in reagent water.
J = Indicates an estimated value when the compound is detected, but is below the Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
E = Compound is detected at a concentration outside the calibration limits.
* = Practical Quantitation Limits listed are approximately 10 times the detection limits for reagent water.
Unless otherwise noted all concentrations and PQL's for soils are quantitated on an as is basis.
NA = Not applicable or not available

Approved: _____ _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-2		
Lab Sample Number	: X27974	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
Date Analyzed	: 11/07/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4495
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.2	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.0		2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	88%

Qualifiers:

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J = Indicates an estimated value when the compound is detected, but is below the Practical Quantitation Limit (PQL).
B = Compound found in blank and sample. Compare blank and sample data.
E = Compound is detected at a concentration outside the calibration limits.
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NA = Not applicable or not available

Approved: _____ _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-3		
Lab Sample Number	: X27975	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/08/90	Method	: 8260(8240)
Date Analyzed	: 11/08/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4518
Percent Loss on Drying	: NA	Method Blank No.	: RB110890

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.4	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.3	B	2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	109%

Qualifiers:

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Approved: _____ _____
John D Parker Quality Assurance Officer

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-4		
ab Sample Number	: X27976	Client Project No.	: NMEID/NMBRID
ate Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 10.00
Date Extracted/Prepared	: 11/08/90	Method	: 8260(8240)
ate Analyzed	: 11/08/90	Matrix	: WATER
ethanol Extract?	: N	Lab File No.	: >4519,>V4597
ercent Loss on Drying	: NA	Method Blank No.	: RB110890

ompound Name	Cas Number	Conc. ug/L	PQL* ug/L
enzene	71-43-2	590.0	20
Toluene	108-88-3	35.3 B	20
thyl Benzene	100-41-4	518.4	20
otal Xylenes	1330-20-7	1871.1 B	20

	Conc. mg/L	Reporting Limit mg/L
OTAL VOLATILE HYDROCARBONS ^^	5	0.5

urrogate Recoveries:

oluene-d8 108%

ualifiers:

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= Compound is detected at a concentration outside the calibration limits.
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Unless otherwise noted all concentrations and PQL's for soils are quantitated on an as is basis.
NA = Not applicable or not available

Approved: _____ _____
John D Parker Quality Assurance Officer

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-5		
Lab Sample Number	: X27977	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
Date Analyzed	: 11/07/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4498
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.5	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.5		2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	88%

Qualifiers:

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E = Compound is detected at a concentration outside the calibration limits.
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Approved: _____ _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

lient Sample Number	: MW-6		
ab Sample Number	: X27978	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
ate Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
ate Analyzed	: 11/07/90	Matrix	: WATER
ethanol Extract?	: N	Lab File No.	: >V4499
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L	PQL* ug/L
enzene	71-43-2	10.7	2
oluene	108-88-3	23.2 B	2
thyl Benzene	100-41-4	32.7	2
Total Xylenes	1330-20-7	175.5	2

	Conc. mg/L	Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^	4	0.5

urrogate Recoveries:

Toluene-d8	104%

ualifiers:

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NA = Not applicable or not available

Approved: _____

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(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-7		
Lab Sample Number	: X27979	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
Date Analyzed	: 11/07/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4500
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L	PQL* ug/L
Benzene	71-43-2	9.8	2
Toluene	108-88-3	3.0 B	2
Ethyl Benzene	100-41-4	20.8	2
Total Xylenes	1330-20-7	4.9	2

	Conc. mg/L	Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^	1	0.5

Surrogate Recoveries:

Toluene-d8	102%

Qualifiers:

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Approved: _____ _____

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4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: MW-8		
ab Sample Number	: X27980	Client Project No.	: NMEID/NMBRID
ate Received	: 11/02/90	Lab Project No.	: 9562
ate Sampled	: 10/30/90	Effective Dilution	: 10.00
Date Extracted/Prepared	: 11/08/90	Method	: 8260(8240)
ate Analyzed	: 11/08/90	Matrix	: WATER
ethanol Extract?	: N	Lab File No.	: >V4522
ercent Loss on Drying	: NA	Method Blank No.	: RB110890

ompound Name	Cas Number	Conc. ug/L	PQL* ug/L
enzene	71-43-2	220.0	20
Toluene	108-88-3	120.0 B	20
thyl Benzene	100-41-4	960.0	20
otal Xylenes	1330-20-7	1140.0 B	20

	Conc. mg/L	Reporting Limit mg/L
OTAL VOLATILE HYDROCARBONS ^^	9	0.5

Surrogate Recoveries:

oluene-d8	89%

Qualifiers:

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Approved: _____ _____
John D Parker Quality Assurance Officer

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: FIELD BLANK		
Lab Sample Number	: X27981	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/07/90	Method	: 8260(8240)
Date Analyzed	: 11/07/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4502
Percent Loss on Drying	: NA	Method Blank No.	: RB110790

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.5	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	0.8		2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	103%

Qualifiers:

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Approved: _____ _____

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

lient Sample Number	: TRIP BLANK		
ab Sample Number	: X27982	Client Project No.	: NMEID/NMBRID
ate Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/30/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/08/90	Method	: 8260(8240)
ate Analyzed	: 11/08/90	Matrix	: WATER
ethanol Extract?	: N	Lab File No.	: >V4516
ercent Loss on Drying	: NA	Method Blank No.	: RB110890

ompound Name	Cas Number	Conc. ug/L		PQL* ug/L
enzene	71-43-2		U	2
Toluene	108-88-3	0.7	JB	2
thyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.5	B	2

	Conc. mg/L		Reporting Limit mg/L
OTAL VOLATILE HYDROCARBONS ^^		U	0.5

urrogate Recoveries:

oluene-d8	104%

ualifiers:

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Approved: _____ _____
John D Parker Quality Assurance Officer

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA

Client Sample Number	: TAP WATER 153 LaVega		
Lab Sample Number	: X27983	Client Project No.	: NMEID/NMBRID
Date Received	: 11/02/90	Lab Project No.	: 9562
Date Sampled	: 10/31/90	Effective Dilution	: 1.00
Date Extracted/Prepared	: 11/08/90	Method	: 8260(8240)
Date Analyzed	: 11/08/90	Matrix	: WATER
Methanol Extract?	: N	Lab File No.	: >V4517
Percent Loss on Drying	: NA	Method Blank No.	: RB110890

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.6	JB	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	2.0	B	2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	88%

Qualifiers:

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Approved: _____ _____
John D Parker — Quality Assurance Officer

EVERGREEN ANALYTICAL, INC.
4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA
METHOD BLANK REPORT

Method Blank Number	: RB110790	Client Project No.	: NMEID/NMBRID
Date Extracted/Prepared	: 11/07/90	Lab Project No.	: 9562
Date Analyzed	: 11/07/90	Effective Dilution	: 1.00
		Method	: 8260(8240)
		Lab File No.	: >V4491

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.5	J	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7		U	2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	104%

Qualifiers:

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Approved: _____ _____
John D Parker Quality Assurance Officer

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4036 Youngfield Wheat Ridge CO 80033
(303)425-6021

BTEX ANALYSIS DATA
METHOD BLANK REPORT

Method Blank Number	: RB110890	Client Project No.	: NMEID/NMBRID
Date Extracted/Prepared	: 11/08/90	Lab Project No.	: 9562
Date Analyzed	: 11/08/90	Effective Dilution	: 1.00
		Method	: 8260(8240)
		Lab File No.	: >V4515

Compound Name	Cas Number	Conc. ug/L		PQL* ug/L
Benzene	71-43-2		U	2
Toluene	108-88-3	0.6	J	2
Ethyl Benzene	100-41-4		U	2
Total Xylenes	1330-20-7	1.6		2

	Conc. mg/L		Reporting Limit mg/L
TOTAL VOLATILE HYDROCARBONS ^^		U	0.5

Surrogate Recoveries:

Toluene-d8	110%

Qualifiers:

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Approved: _____
John D Parker

_____
Quality Assurance Officer

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 01182801

TEST : FUEL HYDROCARBONS (MODIFIED EPA METHOD 8015)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE SAMPLED	: 11/28/90
PROJECT #	: (NONE)	DATE RECEIVED	: 11/30/90
PROJECT NAME	: NMEID/NMBRID	DATE EXTRACTED	: 12/03/90
CLIENT I.D.	: MW-2	DATE ANALYZED	: 12/04/90
SAMPLE MATRIX	: AQUEOUS	UNITS	: MG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	0.7
HYDROCARBON RANGE	C5-C14
HYDROCARBONS QUANTITATED USING	GASOLINE
SURROGATE PERCENT RECOVERIES	
DI-N-OCTYL-PHTHALATE (%)	105

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 01182802

TEST : FUEL HYDROCARBONS (MODIFIED EPA METHOD 8015)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE SAMPLED	: 11/29/90
PROJECT #	: (NONE)	DATE RECEIVED	: 11/30/90
PROJECT NAME	: NMEID/NMBRID	DATE EXTRACTED	: 12/03/90
CLIENT I.D.	: MW-4	DATE ANALYZED	: 12/04/90
SAMPLE MATRIX	: AQUEOUS	UNITS	: MG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	0.9
HYDROCARBON RANGE	C5-C14
HYDROCARBONS QUANTITATED USING	GASOLINE
SURROGATE PERCENT RECOVERIES	
DI-N-OCTYL-PHTHALATE (%)	119

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : FUEL HYDROCARBONS (MODIFIED EPA METHOD 8015)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	ATI I.D.	: 011828
PROJECT #	: (NONE)	DATE EXTRACTED	: 12/03/90
PROJECT NAME	: NMEID/NMBRID	DATE ANALYZED	: 12/03/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<0.5
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

SURROGATE PERCENT RECOVERIES

DI-N-OCTYL-PHTHALATE (%)	112

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 011828

TEST : FUEL HYDROCARBONS (MODIFIED EPA METHOD 8015)

CLIENT : LEGGETTE, BRASHEARS & GRAHAM, INC.
PROJECT # : (NONE)
PROJECT NAME : NMEID/NMBRID
REF I.D. : 01299903

DATE ANALYZED : 12/04/90
SAMPLE MATRIX : AQUEOUS
UNITS : MG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
FUEL HYDROCARBONS	<0.5	5.2	5.8	112	5.9	113	2

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 01182801

TEST : BTEX (8020)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE SAMPLED	: 11/28/90
PROJECT #	: (NONE)	DATE RECEIVED	: 11/30/90
PROJECT NAME	: NMEID/NMBRID	DATE EXTRACTED	: N/A
CLIENT I.D.	: MW-2	DATE ANALYZED	: 12/03/90
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	1.1
ETHYLBENZENE	<0.5
TOTAL XYLENES	0.6
SURROGATE PERCENT RECOVERIES	
BROMOFLUOROBENZENE (%)	87

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 01182802

TEST : BTEX (8020)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE SAMPLED	: 11/29/90
PROJECT #	: (NONE)	DATE RECEIVED	: 11/30/90
PROJECT NAME	: NMEID/NMBRID	DATE EXTRACTED	: N/A
CLIENT I.D.	: MW-4	DATE ANALYZED	: 12/03/90
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	49
TOLUENE	1.0
ETHYLBENZENE	8.4
TOTAL XYLENES	14
SURROGATE PERCENT RECOVERIES	
BROMOFLUOROBENZENE (%)	91

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 01182803

TEST : BTEX (8020)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE SAMPLED	: 11/27/90
PROJECT #	: (NONE)	DATE RECEIVED	: 11/30/90
PROJECT NAME	: NMEID/NMBRID	DATE EXTRACTED	: N/A
CLIENT I.D.	: TRAVEL BLANK	DATE ANALYZED	: 12/03/90
SAMPLE MATRIX	: AQUEOUS	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5
SURROGATE PERCENT RECOVERIES	
BROMOFLUOROBENZENE (%)	90

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : BTEX (8020)

		ATI I.D.	: 011828
CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	DATE EXTRACTED	: 12/03/90
PROJECT #	: (NONE)	DATE ANALYZED	: 12/03/90
PROJECT NAME	: NMEID/NMBRID	UNITS	: UG/L
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
BENZENE	<0.5
TOLUENE	<0.5
ETHYLBENZENE	<0.5
TOTAL XYLENES	<0.5

SURROGATE PERCENT RECOVERIES

BROMOFLUOROBENZENE (%)	98

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : FUEL HYDROCARBONS (MODIFIED EPA METHOD 8015)

CLIENT	: LEGGETTE, BRASHEARS & GRAHAM, INC.	ATI I.D.	: 011828
PROJECT #	: (NONE)	DATE EXTRACTED	: 12/03/90
PROJECT NAME	: NMEID/NMBRID	DATE ANALYZED	: 12/03/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<0.5
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

SURROGATE PERCENT RECOVERIES

DI-N-OCTYL-PHTHALATE (%)	117

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 011828

TEST : BTEX (8020)

CLIENT : LEGGETTE, BRASHEARS & GRAHAM, INC.
PROJECT # : (NONE)
PROJECT NAME : NMEID/NMBRID
REF I.D. : 01180201

DATE ANALYZED : 10/30/90
SAMPLE MATRIX : AQUEOUS
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	<0.5	10	9.3	93	9.2	92	1
TOLUENE	<0.5	10	9.1	91	9.0	90	1
ETHYLBENZENE	<0.5	10	8.8	88	8.6	86	2
XYLENES	<0.5	30	26	87	25	83	4

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.
Phoenix, Arizona

Chain of Custody

DATE 11/29/90 PAGE 1 OF 1

PROJECT MANAGER: Joan Newsom

COMPANY: Leggette, Brashears, & Graham
ADDRESS:

BILL TO: Leggette, Brashears & Graham
COMPANY: 423 Sixth NW
ADDRESS: Albuquerque NM 87102

Joan Newsom (SAMPLERS: (Signature))
(505)247-2000 (PHONE NUMBER)

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	BTEX	TVH 8015												NUMBER OF CONTAINERS
MW-2	11/28/90	4	water	1	2	1												3
MW-4	11/29/90		water	2	2	1												3
Travel Blank	11/27/90			3	1		1											1

PROJECT INFORMATION

PROJECT NUMBER:
PROJECT NAME: NMEID/NMBRID
PURCHASE ORDER NUMBER: 0025
VIA:
TAT: ☐ 24 HRS ☐ 48 HRS ☐ 1 WK ☐ 2 WKS

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	7
CHAIN OF CUSTODY SEALS	N
INTACT?	Y
RECEIVED GOOD COND./COLD	Y
LAB NUMBER	011828

SAMPLE DISPOSAL INSTRUCTIONS

☐ ATI Disposal @ $5.00 each ☐ Return ☐ Pickup (will call)

Comments: 1 VOA Broke on Sample #7
Fax results 505-843-7036

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Joan Newsom Time: 2	Signature: Time:	Signature: Time:
Printed Name: Joan Newsom Date: 11/29/90	Printed Name: Date:	Printed Name: Date:
Company: LBG	Company:	Company:
RECEIVED BY: 1.	**RECEIVED BY: 2.**	**RECEIVED BY: (LAB) 3.**
Signature: Time:	Signature: Time:	Signature: Time: 9:55
Printed Name: Date:	Printed Name: Date:	Printed Name: Linda Eshelman Date: 11/30/90
Company:	Company:	Analytical Technologies, Inc.

ATI Labs: San Diego (619) 458-9141 • Phoenix (602) 438-1530 • Seattle (206) 228-8335 • Pensacola (904) 474-1001 DISTRIBUTION: White, Canary - ANALYTICAL TECHNOLOGIES, INC. • Pink - ORIGINATOR

REVIEWED BY
DATE

PRIOR AUTHORIZATION IS REQUIRED FOR ALL RUSH PROJECTS