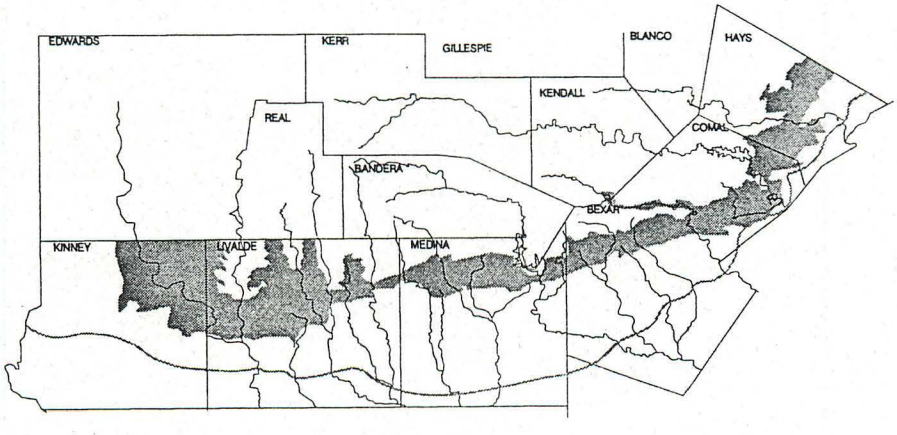
EDWARDS UNDERGROUND
WATER DISTRICT

Report 94-04

EDWARDS AQUIFER HYDROGEOLOGIC REPORT FOR 1993



EDWARDS UNDERGROUND WATER DISTRICT

1615 N. St. Marys
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EDWARDS AQUIFER HYDROGEOLOGIC REPORT FOR 1993

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Edwards Underground Water District

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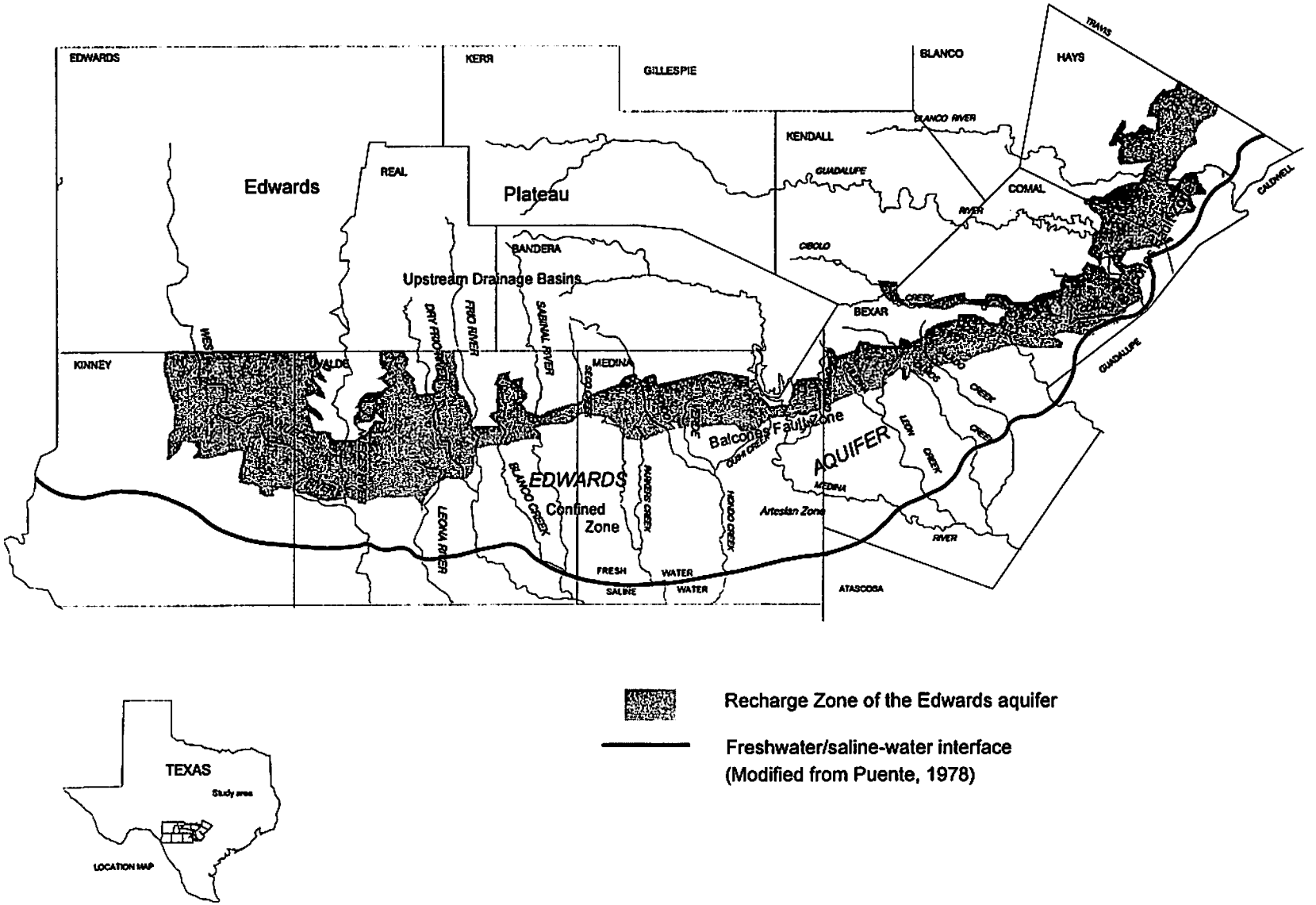
1.0 INTRODUCTION

The Edwards Underground Water District (District) was created by the Texas Legislature in 1959, and is charged with conserving, protecting, recharging and preventing pollution of the groundwater in the Edwards aquifer. To accomplish this mandate, the District conducts groundwater resource investigations, develops demand management plans, as well as informs and educates the public about the aquifer. In keeping with the District's statutory charge, the District has prepared this technical data report with a historical perspective for calendar year 1993.

The following report addresses the portion of the Edwards aquifer that extends through six counties in south central Texas, from the groundwater divide near Brackettville in Kinney County, to the groundwater divide near Kyle in central Hays County. **Figure 1.1** is a regional map showing primary physiographic features of the Edwards aquifer within the report area.

Figure 1.1 Edwards aquifer and other physiographic features in the San Antonio area.



2.0 WATER LEVELS

Over 850,000 water level measurements from 30 digital recorder-equipped observation wells and monthly measurements from 22 periodic observation wells, were taken in 1993 as part of the District's water level data collection activities. **Figure 2.1** shows the locations of the observation wells within the network.

Periodic water level measurements from a variety of wells have been compiled in the San Antonio area of the Edwards aquifer region since 1929. These periodic measurements were enhanced with the introduction of continuous water level recorders in some of the observation wells in the 1930's by the United States Geological Survey (USGS). The District has further enhanced the data with the introduction of continuous digital recorders, developing a groundwater network from eastern Kinney County to central Hays County.

The digital recorders measure water levels across the aquifer every 15 minutes, 365 days a year. These wells are equipped with a float device or a pressure transducer for water level readings. Data is recorded on digital storage cards and then downloaded during site inspection, or by modem, to the District's central data collection facility in San Antonio. **Table 2.1** shows the annual and period of record high and low water levels measured in five selected Edwards aquifer observation wells.

Figure 2.1 Edwards Underground Water District water level observation well network.

County	Well I.D. Number	Name (Location)
Hays	LR 67-01-303	City of Kyle (Index)
	LR 67-01-808	Kriegel (Index)
	LR 67-09-102	Nicholson
	LR 67-09-111	Southwest Texas
	LR 68-57-802	Gregg
	LR 67-01-304	City of Kyle (Index)
	LR 67-01-812	San Marcos EWL
Comal	DX 68-18-701	State Hwy 306
	DX 68-22-809	Deason
	DX 68-29-103	Landa Park, New Braunfels (Index)
	DX 68-23-701	Schaefer
	DX 68-30-208	Backen
	DX 68-18-801	Juntech
Atascosa	AL 68-50-201	City of Lytle

County	Well I.D. Number	Name (Location)
Bexar	AY 68-30-211	Cibolo Creek
	AY 68-29-302	Judson Road
	AY 68-29-701	Airport
	AY 68-33-602	Blanco Road (Glen Rose, Cow Creek)
	AY 68-25-823	West Avenue
	AY 68-29-000	Chulon Pass (Glen Rose)
	AY 68-29-103	Hill County
	AY 68-37-203	Dodd Field-J 17 (Index)
	AY 68-27-302	Cedar Creek (Glen Rose)
	AY 68-29-209	Encino Park
	AY 68-43-501	Schirmer
	AY 68-43-608	Yanaalan
	AY 68-43-N28	Quinn
	AY 68-43-607	Grothues
	AY 68-19-806	La Escondida (Glen Rose)
	AY 68-19-618	Boerne Stage Road (Glen Rose)

County	Well I.D. Number	Name (Location)
Medina	TD 68-33-604	Stinson
	TD 68-48-102	Mueninik
	TD 68-47-302	Hondo Pool
	TD 68-38-504	Tarply Road
	TD 68-47-308	City of Hondo (Index)
	TD 68-36-601	Seco Creek
	TD 68-41-301	City of Castroville (Index)
Uvalde	YP 68-50-202	Hulne
	YP 68-50-101	U.V. Cattle Co.
	YP 68-35-402	Livingston
	YP 70-40-801	Nueces River
	YP 68-35-501	Frio River
	YP 68-37-402	State Hwy. 187
	YP 68-43-401	City of Sabinal
	YP 68-43-607	Knippa
	YP 68-50-302	City of Uvalde (Index)
	YP 68-43-408	North Uvalde
	YP 68-51-406	Ekar
	YP 68-42-709	Seven Mile Hill

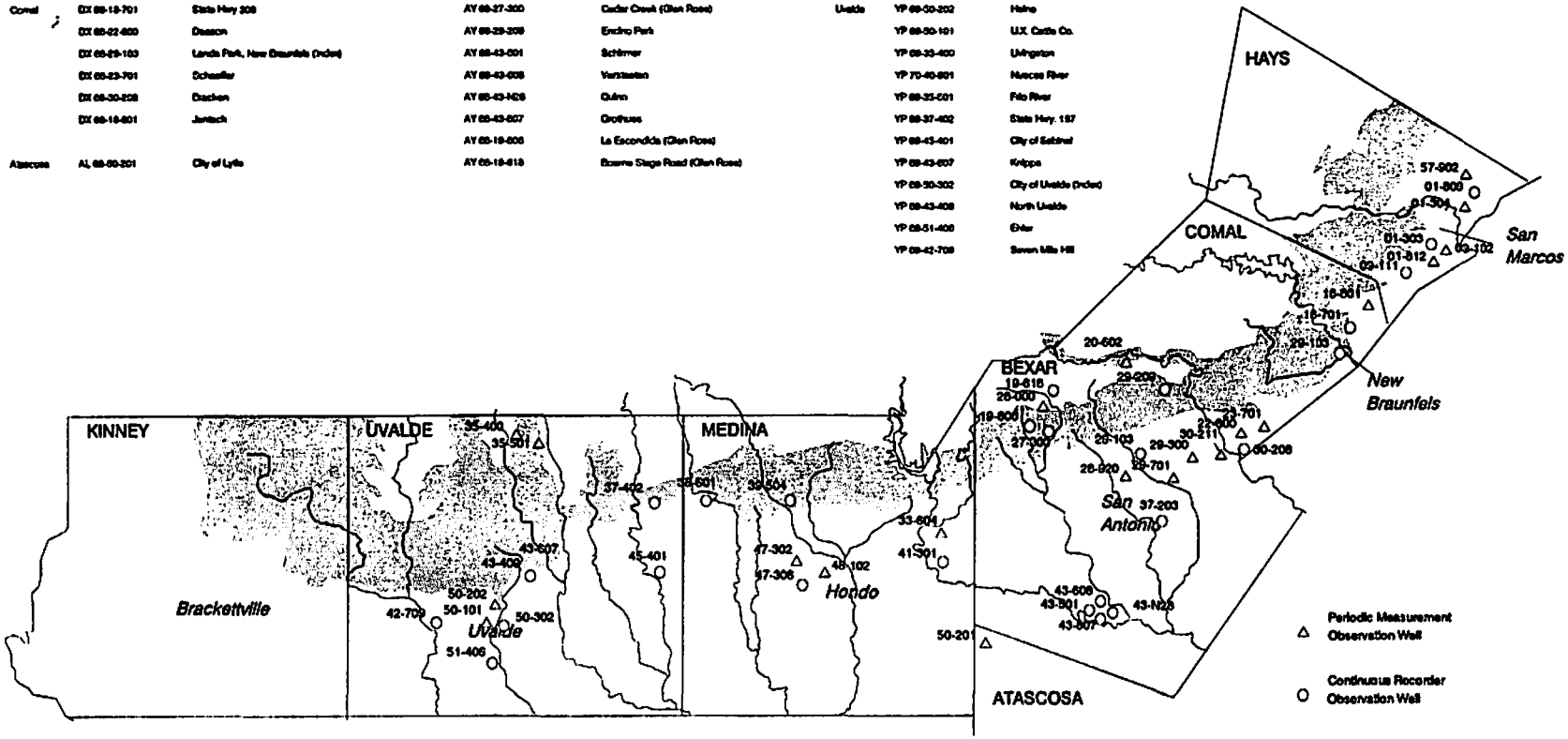


Table 2.1 Annual water level highs and lows for selected index wells in the San Antonio area of the Edwards aquifer, 1934 - 1993 (Measured in feet above mean sea level).

YEAR	City of Uvalde Uvalde County YP-69-50-302		Castroville Medina County TD-68-41-301		San Antonio Bexar County AY-68-37-203		New Braunfels Comal County DX-68-23-302		San Marcos Hays County LR-61-01-304	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1934	866.6	---	---	---	675.2	666.8	---	---	---	---
1935	872.1	---	---	---	681.3	666.8	---	---	---	---
1936	876.6	876.5	---	---	683.0	676.6	---	---	---	---
1937	878.1	877.1	---	---	682.1	674.9	---	---	583.4	581.6
1938	875.8	874.0	---	---	681.4	673.6	---	---	590.6	581.5
1939	873.4	869.6	---	---	674.1	665.7	---	---	580.6	569.6
1940	872.3	868.5	---	---	671.4	661.0	---	---	572.2	568.7
1941	875.7	867.7	---	---	682.5	668.3	---	---	587.7	578.6
1942	875.8	871.9	---	---	685.4	669.7	---	---	580.8	573.7
1943	874.5	868.0	---	---	679.6	668.5	---	---	578.2	574.6
1944	869.3	866.8	---	---	677.6	667.1	---	---	580.5	579.3
1945	870.1	865.2	---	---	681.9	668.8	---	---	581.8	---
1946	867.1	862.9	---	---	681.2	663.6	---	---	580.3	---
1947	870.7	867.1	---	---	680.7	665.8	---	---	577.3	577.0
1948	868.4	860.5	---	---	667.7	653.7	624.4	624.3	560.5	559.4
1949	871.2	859.1	---	---	671.6	655.6	626.7	624.1	562.3	561.8
1950	871.2	861.8	687.0	674.9	665.4	653.8	625.2	624.0	575.8	575.2
1951	861.8	846.8	675.2	659.9	656.0	640.6	624.2	622.5	576.3	569.4
1952	846.8	834.9	663.8	649.9	650.5	633.4	623.0	621.5	573.0	569.1
1953	835.2	817.8	665.1	647.7	651.5	630.5	623.6	621.1	584.5	573.2
1954	836.7	823.1	660.3	642.4	646.3	628.9	623.1	620.5	581.8	562.8
1955	834.3	824.1	649.1	635.6	638.5	624.2	621.9	619.8	575.7	558.4
1956	834.2	814.2	641.6	622.3	632.2	612.5	621.0	613.3	569.8	542.2
1957	840.9	811.0	666.1	633.0	653.8	624.4	624.7	620.1	584.9	568.3
1958	866.1	840.8	704.4	665.7	679.6	653.3	626.6	624.6	593.6	580.8
1959	876.1	866.2	703.8	689.0	677.7	661.5	627.1	625.1	591.4	580.5
1960	876.9	873.1	706.3	686.0	679.4	657.9	627.1	624.9	589.4	584.3
1961	878.5	875.6	710.3	693.4	681.2	663.9	627.3	625.7	591.6	573.2
1962	878.3	867.7	703.6	676.3	675.5	646.9	626.3	623.2	584.1	565.0
1963	869.7	860.9	689.1	659.2	665.8	635.0	625.0	621.7	581.6	560.0
1964	860.9	849.0	676.3	654.8	657.1	632.8	624.1	621.6	578.2	562.8
1965	865.8	860.3	689.6	666.8	675.0	645.6	626.6	623.5	590.1	573.4
1966	867.2	860.2	686.1	665.0	668.8	642.7	625.9	623.1	589.0	566.6
1967	867.4	856.4	679.4	645.2	659.7	624.9	624.6	620.0	582.8	556.6
1968	873.3	864.8	702.0	679.2	678.3	655.9	627.2	624.6	593.8	574.4
1969	875.0	866.5	694.8	670.5	676.1	642.8	626.3	623.4	588.7	567.7
1970	876.1	871.3	700.7	678.8	677.1	650.4	627.2	624.3	593.2	575.0
1971	877.7	864.0	701.3	646.4	674.6	627.9	626.2	621.0	577.1	551.3
1972	877.8	874.6	704.6	676.7	679.0	651.2	626.7	624.1	579.7	576.3
1973	881.6	874.5	731.2	690.1	696.5	665.9	629.8	626.1	589.9	572.3
1974	881.4	876.0	723.8	696.0	689.2	660.9	629.1	625.8	593.6	558.5
1975	882.1	879.4	721.0	708.2	686.9	672.0	629.3	626.5	589.8	571.4
1976	884.9	876.0	732.4	694.9	693.1	663.8	629.4	625.8	584.6	571.2
1977	886.2	881.3	737.8	715.3	696.0	675.6	630.2	627.6	587.4	562.1
1978	882.6	875.6	722.4	681.7	684.1	650.1	628.1	624.5	572.0	540.4
1979	882.0	876.1	728.2	710.3	690.5	676.4	629.0	627.3	584.9	572.0
1980	879.1	868.0	716.1	666.8	680.3	640.8	627.5	623.0	572.0	551.8
1981	881.8	867.9	723.2	698.8	686.0	668.6	628.0	625.5	586.2	565.5
1982	881.8	876.4	717.1	682.8	680.5	645.3	627.3	623.6	584.7	544.7
1983	877.1	871.3	698.2	667.7	670.0	642.1	625.6	623.0	588.7	560.4
1984	873.3	856.9	684.5	642.0	657.0	623.3	624.4	619.6	582.5	544.3
1985	876.9	862.2	699.0	670.7	674.5	644.1	626.8	623.3	591.4	561.8
1986	877.8	872.2	704.6	674.2	685.6	649.8	627.7	624.1	595.0	576.3
1987	889.1	877.9	743.5	711.1	699.2	676.9	630.4	627.2	595.9	583.5
1988	887.0	878.0	725.3	679.9	684.9	647.7	627.9	623.9	593.2	585.9
1989	879.0	866.6	695.3	650.5	663.9	626.4	624.9	620.5	571.7	571.5
1990	872.9	861.6	679.5	640.8	658.1	622.7	624.3	620.3	577.6	561.2
1991	873.8	865.4	703.8	666.1	680.3	640.5	627.0	623.3	593.8	575.1
1992	885.2	872.9	743.6	704.3	703.3	680.7	630.9	627.0	595.4	586.2
1993	884.9	877.3	730.2	706.6	692.8	672.0	629.4	626.9	593.7	575.9
Average	High 871.8	Low 863.0	High 700.5	Low 672.2	High 675.1	Low 652.6	High 626.5	Low 623.4	High 583.6	Low 568.4
Record Level	High 889.1	Low 811.0	High 743.6	Low 622.3	High 703.3	Low 612.5	High 630.9	Low 613.3	High 595.9	Low 540.4
Month	June	April	June	Aug.	June	Aug.	June	Aug.	Sept.	July
Year	1987	1957	1992	1956	1992	1956	1992	1956	1987	1978

Data Source - Edwards Underground Water District, 1994.

The water level observation wells that are equipped with digital recorders, are located in the water-table and the artesian portion of the Edwards aquifer. Since 1991, the District has been collecting water level data in northern Bexar County from the Glen Rose formation. **Figure 2.2** compares the water levels in the Edwards and Glen Rose aquifers for 1993. In addition to monitoring the Edwards and Glen Rose aquifers, the District has collected data in southern Uvalde County from the Leona formation since 1966. **Figure 2.3** compares water levels in the Edwards and Leona aquifers for 1993. Water level monitoring assists in research and management of these aquifers by providing information on current and historical aquifer conditions.

To augment the digital recorder network, District staff measure water levels monthly at various wells across the region and 50 additional wells during periods of extreme high or low water level conditions. These periodic measurements are performed by "tape and chalk method" and occasionally by conductivity meter. Water level data collected by the District are forwarded to regional and local entities such as the Texas Water Development Board (TWDB) and the USGS.

Historical water level trends in observation wells, along with corresponding precipitation and discharge information, are necessary to determine the quantity of groundwater stored in the aquifer during any given period. Water level increases generally indicate greater quantities of water are recharging the aquifer than are

Figure 2.2 Comparison of Edwards aquifer (J-17-Bexar County) and Glen Rose aquifer(AY 68-19-806) index wells.

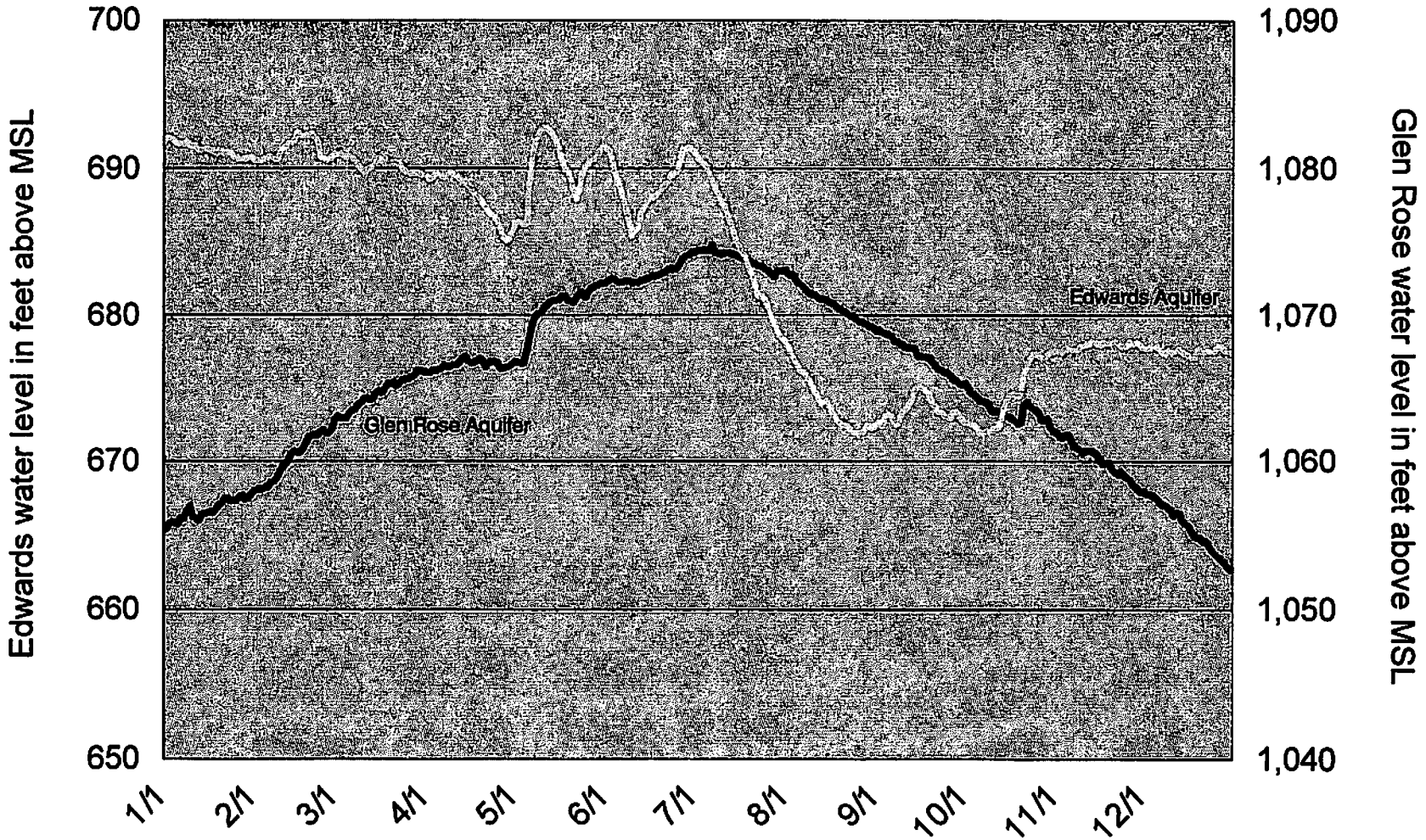
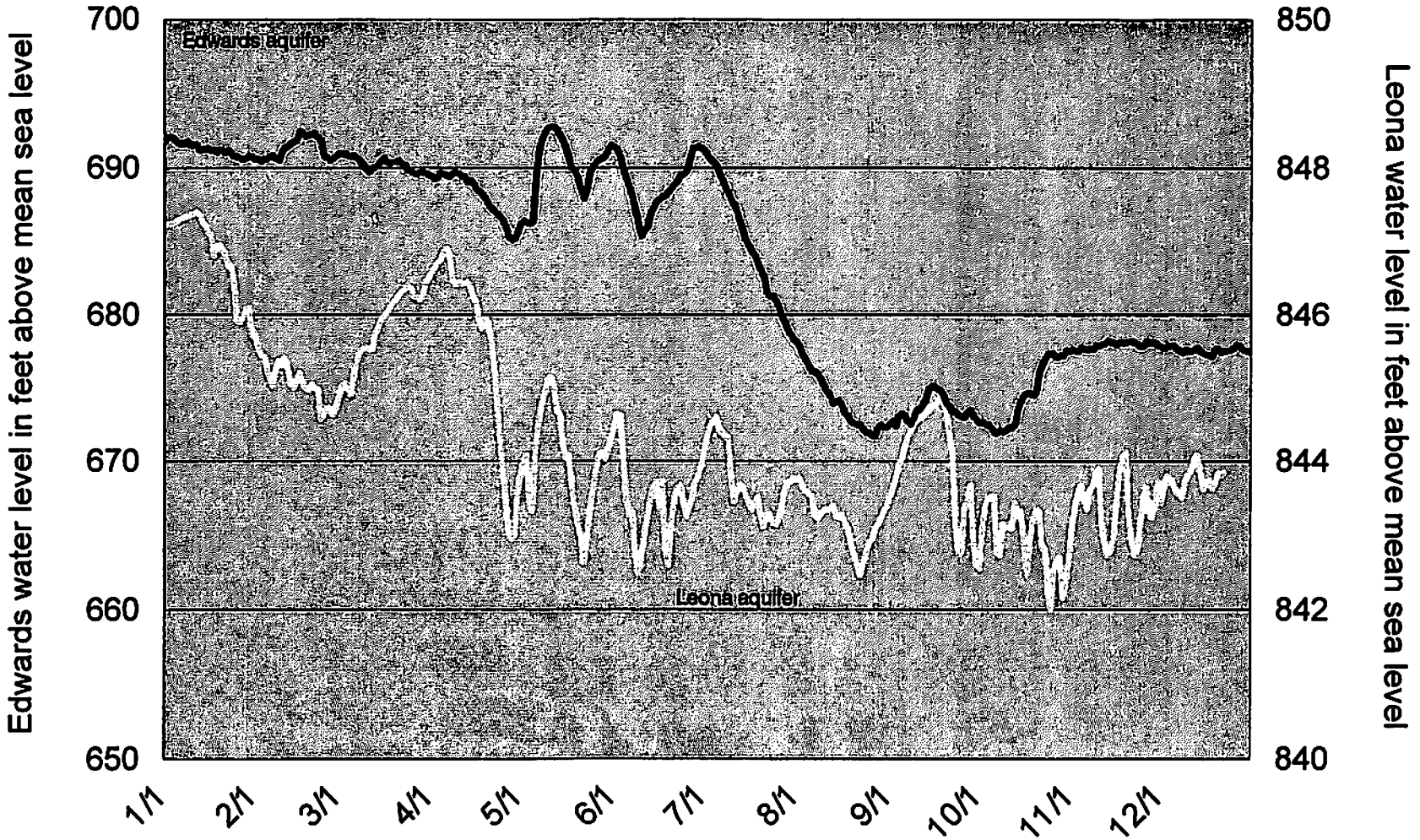


Figure 2.3 Comparison of the Edwards aquifer (Bexar County, Ay 68-37-203) and Leona aquifer (Ehler, YP 69-51-406) for 1993.



being discharged. During periods where groundwater recharge is greater than discharge, springflow increases in proportion to groundwater level increases. Likewise, during drought or high demand conditions water levels and springflows generally decline, reflecting greater groundwater discharge than groundwater recharge. In 1993, total discharge was greater than total recharge, as was demonstrated by declining water levels throughout most of the year.

Water level tables and hydrographs for selected wells depicting water level data collected in 1993 are shown in **Appendix 10.1.** Water levels are displayed in feet above mean sea level.

3.0 PRECIPITATION

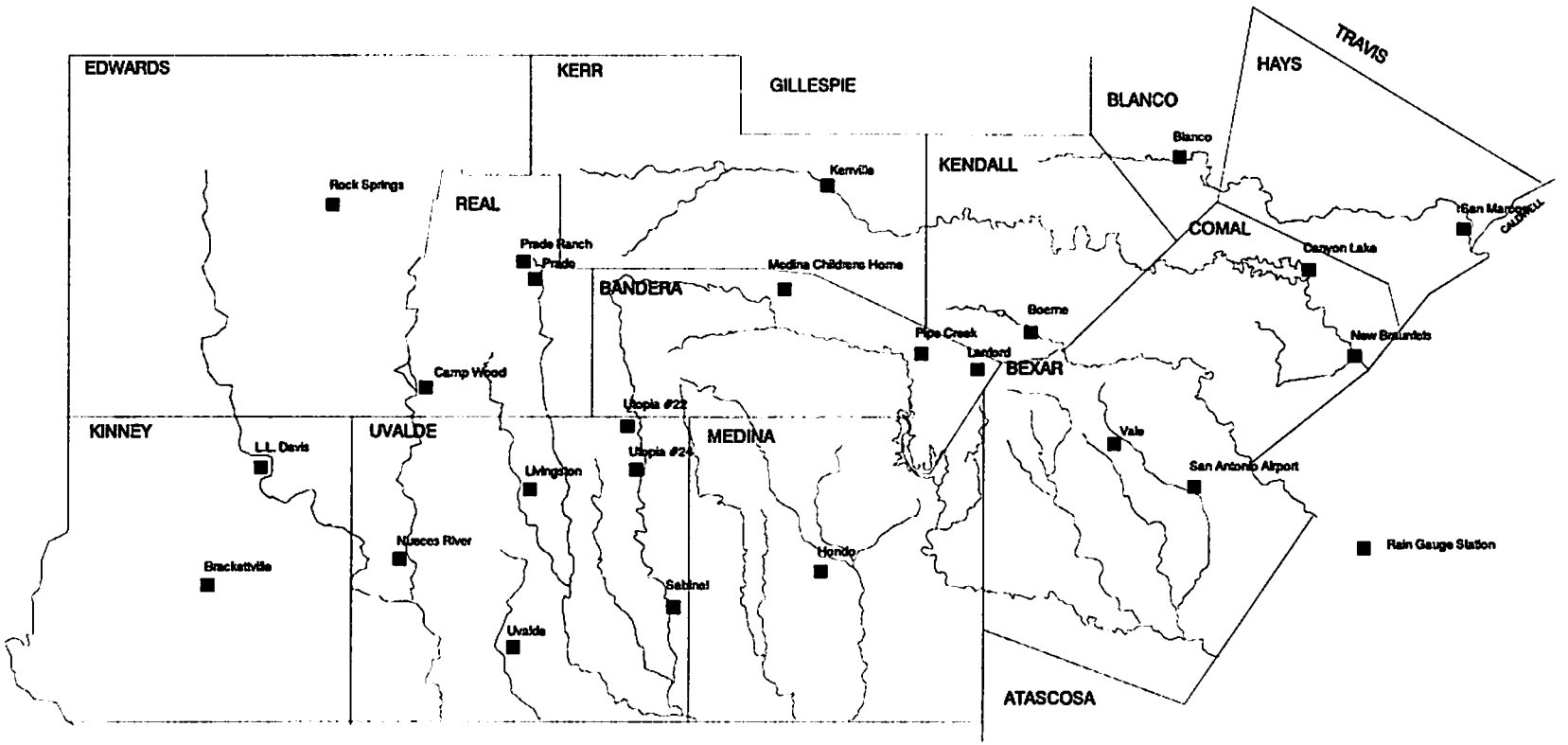
Precipitation is the primary water source for recharge to the Edwards aquifer. Water levels monitored by the District's network of observation wells across the artesian zone have risen within hours of a heavy rainfall event on the recharge zone or associated upstream drainage basin in the Central Texas hill country.

Annual precipitation in the Edwards aquifer region is monitored by the District to determine the volume of groundwater recharge to the aquifer. Precipitation data are gathered from District rain gauge stations, National Oceanic and Atmospheric Administration(NOAA) weather stations, and USGS rain gauge stations located across the recharge zone and upstream drainage basins.

A map showing the locations of the precipitation gauging stations utilized by the District to record area rainfall is shown in **Figure 3.1.**

Daily precipitation data are forwarded every month to the District from ten rain gauge observation sites located on the recharge zone. This information is augmented with data from 14 weather and rain gauge stations maintained by NOAA and the USGS. The precipitation information is used to calculate recharge and to monitor any precipitation trends that may affect recharge to the Edwards aquifer. The District plans to install 60 additional rain gauges

Figure 3.1 Regional rain gauge network utilized by the Edwards Underground Water District to monitor precipitation in 1993.



throughout the recharge zone and associated upstream drainage basins by the end of 1994, as part of a real-time data collection network, enhancing the District's ability to calculate recharge. The enhanced network's capability to supply instantaneous rain and stream flow information may be used by local communities as part of their flood warning networks.

Precipitation data from San Antonio have been maintained since 1871. Historical aquifer water level trends, recharge, and springflow are closely related to precipitation. Water levels, recharge and springflow decrease during periods of low precipitation.

The amount of rainfall during the first six months of 1993 was recorded at normal to above normal levels in the Edwards aquifer region. However, during the last six months of the year precipitation for the region was far below normal. Several rain gauges posted record low cumulative precipitation levels for entire months. Sharp declines in aquifer water levels across the region occurred during July and Aμgust, as the result of low precipitation and subsequent increases in water demand. **Table 3.1** shows annual precipitation for selected rain gauges in the region. **Table 3.2** shows monthly measurements for 1993 at selected rain gauge stations across the region. A hydrograph of precipitation for San Antonio from 1871 to present is shown in **Figure 3.2** .

Table 3.1 Annual precipitation for selected rain gauges in the Edwards aquifer region, 1934 - 1993. (Measurement in inches)

Year	Brackettville	Uvalde	Sabinal	Hondo	San Antonio	Boerne	New Braunfels	San Marcos
1934	---	16.70	18.07	23.97	27.65	26.78	30.80	35.67
1935	---	41.17	48.21	58.73	42.93	52.93	41.67	41.09
1936	22.34	24.53	26.53	35.27	34.11	47.59	30.41	33.48
1937	16.85	17.88	b/ 9.57	22.93	26.07	32.81	29.19	b/26.03
1938	19.97	13.12	15.39	27.56	23.26	24.14	28.32	28.17
1939	18.38	25.30	c/13.98	23.14	18.83	26.20	13.35	18.59
1940	22.43	27.66	27.51	28.13	30.79	32.29	38.11	43.57
1941	21.52	31.79	b/33.74	44.07	26.34	41.60	42.99	48.41
1942	21.01	19.01	b/11.37	34.83	38.46	31.12	42.08	44.65
1943	c/23.39	20.63	17.21	31.43	20.51	26.33	29.93	25.45
1944	24.76	32.76	b/27.62	32.46	33.19	42.98	43.14	47.42
1945	15.69	22.37	26.60	29.57	30.46	33.50	39.38	c/31.74
1946	19.10	26.41	b/14.16	29.65	45.17	45.62	61.60	52.24
1947	c/22.92	22.67	---	18.98	17.32	21.89	27.52	27.53
1948	b/20.02	18.31	---	28.82	23.64	23.77	c/19.88	b/21.27
1949	31.32	34.41	---	39.90	40.81	41.15	43.21	36.22
1950	17.70	18.27	b/15.28	24.91	19.86	24.94	21.13	21.10
1951	14.71	16.07	15.63	b/24.05	24.44	18.76	24.84	30.88
1952	12.26	18.24	23.16	25.56	26.24	37.54	33.87	39.91
1953	10.12	18.34	21.44	20.61	17.56	21.42	30.06	33.39
1954	19.38	15.60	14.72	11.92	13.70	10.29	10.12	13.42
1955	26.55	18.36	20.87	21.21	18.18	19.27	23.12	26.44
1956	7.58	9.29	11.29	15.54	14.31	12.05	18.41	18.37
1957	34.21	39.30	40.03	35.09	48.83	52.55	51.88	46.51
1958	45.37	39.03	41.18	41.60	39.69	40.94	36.40	39.08
1959	27.51	31.51	27.02	30.68	24.50	35.64	40.45	43.47
1960	19.12	23.98	26.24	32.37	29.76	32.55	34.28	45.48
1961	17.91	26.26	27.24	27.36	26.47	25.45	b/15.7	30.02
1962	10.87	14.12	13.58	17.85	23.90	25.26	27.40	28.47
1963	15.07	16.70	18.99	18.90	18.65	20.66	23.41	19.90
1964	20.75	22.30	23.78	28.29	31.88	27.36	30.65	30.27
1965	21.48	26.21	29.41	30.80	36.65	42.41	45.16	45.00
1966	21.63	20.87	21.54	29.46	21.44	29.05	25.98	27.12
1967	21.95	20.10	23.89	30.33	29.26	26.75	31.74	26.41
1968	17.26	25.20	c/29.88	31.91	30.40	35.14	35.97	37.13
1969	28.53	33.38	33.05	32.30	31.42	38.07	33.01	36.59
1970	16.50	13.59	22.13	30.96	22.74	27.79	35.23	32.30
1971	29.46	31.01	31.00	32.96	31.80	45.24	29.43	31.10
1972	21.21	15.49	21.10	25.43	31.49	35.09	42.02	31.90
1973	30.61	30.85	c/35.14	47.82	52.28	50.93	51.66	47.91
1974	18.25	30.94	c/20.93	c/36.41	37.00	41.80	42.85	b/37.28
1975	26.62	24.92	23.65	b/25.84	25.67	33.49	35.82	48.64
1976	34.40	46.04	40.82	45.21	39.13	45.24	49.06	47.46
1977	15.06	19.90	17.06	19.40	29.64	32.43	24.83	29.69
1978	19.04	18.48	21.28	24.64	35.99	35.17	c/36.35	33.08
1979	16.34	32.35	31.44	28.83	36.64	39.97	36.72	38.74
1980	18.33	23.05	22.67	21.27	24.23	39.02	33.69	29.56
1981	28.73	26.24	30.19	27.40	36.37	41.05	43.23	49.62
1982	19.10	23.35	18.44	21.99	22.96	27.64	21.04	c/22.47
1983	19.35	b/24.45	23.33	c/20.92	26.11	34.60	34.13	36.95
1984	16.24	c/15.33	20.67	b/21.19	25.95	26.97	20.90	b/ 8.26
1985	18.93	b/ 5.76	23.67	21.94	41.43	37.77	37.26	33.54
1986	27.44	c/29.86	c/29.62	c/36.01	42.73	43.52	47.14	42.20
1987	39.45	36.39	38.36	40.09	37.96	39.86	b/37.33	37.94
1988	12.08	15.20	13.52	c/ 9.81	19.01	19.49	c/16.27	21.50
1989	16.98	18.65	17.26	16.10	22.14	25.14	20.99	25.46
1990	c/38.24	24.73	30.06	27.01	38.31	42.51	b/24.58	c/35.14
1991	23.11	21.77	31.12	34.55	42.76	48.22	56.55	51.07
1992	22.22	b/27.85	37.73	45.34	46.49	64.17	c/38.84	c/40.33
1993	b/5.47	c/9.32	13.2	16.6	32.00	24.02	c/19.54	c/24.01
Years of Record (complete)	94	91	76	91	110	91	96	91
Yearly Average (period of record)	21.19	24.12	25.22	28.39	28.52	33.25	32.33	33.79

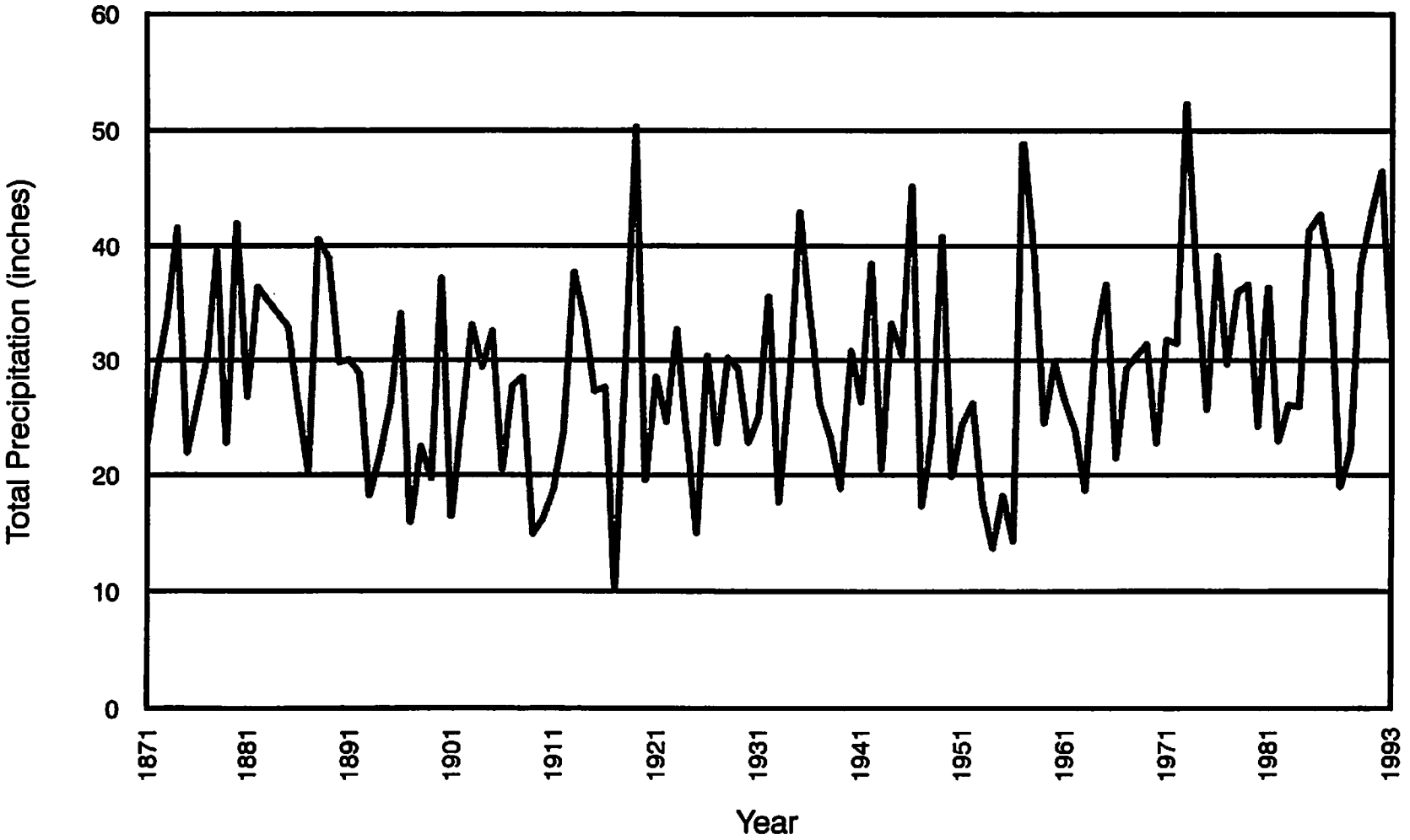
a/ Precipitation data from the US Department of Commerce (1934-1993)
b/ Partial record not included in long-term average; missing one month.
c/ Partial record not included in long-term average; missing more than one month.

Table 3.2 Monthly precipitation data from Edwards Underground Water District rain gauge network and National Oceanic and Atmospheric Administration precipitation gauging stations for 1993. (Measurement in inches)

Gauge	County	Jan	Feb.	Mar	Apr.	May	Jun.	Jul.	Aug	Sep	Oct.	Nov	Dec
Pipe Creek	Bandera	1.40	1.85	1.50	2.00	4.70	5.00	0.00	0.00	0.85	2.90	1.05	0.25
Children's Home	Bandera	1.20	2.80	1.20	3.30	2.60	1.85	0.00	0.00	2.50	2.65	0.55	0.50
Medina	Bandera	1.85	2.56	3.37	1.22	3.88	4.59	0.02	0.10	2.90	3.10	0.88	0.45
Vale	Bexar	0.90	2.60	1.95	1.90	10.85	6.45	0.00	0.00	0.70	2.35	0.65	0.10
Blanco	Blanco	3.12	1.80	2.34	2.01	3.22	5.60	0.00	0.00	4.41	5.04	1.25	1.05
Canyon Dam	Comal	2.34	1.65	3.16	2.74	7.59	---	0.00	0.04	0.72	3.46	0.86	0.63
New Braunfels	Comal	---	2.84	2.83	---	8.73	---	0.00	---	0.65	4.53	---	---
Rock Springs	Edwards	.67	0.86	1.12	2.46	2.40	0.93	0.21	0.55	2.57	0.25	0.15	0.74
San Marcos	Hays	---	.3.47	2.77	---	6.17	4.34	0.00	0.10	---	4.76	1.41	0.99
Boerne	Kendall	2.66	2.58	2.29	2.96	3.37	3.28	0.00	0.00	2.88	2.29	0.92	0.81
Kerrville	Kerr	1.46	2.12	2.13	2.95	2.90	2.75	0.00	0.00	4.10	2.01	1.69	0.95
Bracketville	Kinney	0.50	0.10	0.46	1.64	---	0.63	0.33	0.30	1.14	0.12	0.12	0.13
Davis Ranch	Kinney	---	2.05	1.55	0.35	3.55	0.00	0.75	---	---	---	---	---
Hondo	Medina	0.71	2.12	1.44	1.02	4.82	4.26	0.00	0.03	0.50	0.78	0.74	0.18
Prade Ranch	Real	0.65	1.85	0.85	2.20	1.85	1.90	0.00	0.00	3.90	1.00	0.10	0.55
Livingston	Uvalde	0.95	0.90	1.85	1.10	2.85	3.10	0.00	0.95	2.30	0.70	0.25	0.10
Sabinal	Uvalde	0.75	1.14	2.32	0.90	2.66	3.02	0.00	0.11	1.04	0.37	0.66	0.23
Utopia 22	Uvalde	0.80	1.80	1.75	1.35	3.20	1.45	0.00	0.00	2.00	0.70	0.35	0.25
Utopia 24	Uvalde	2.35	1.50	2.30	1.25	7.30	4.40	0.00	0.00	2.90	0.70	0.55	0.20

Note: The symbol "---" indicates no data available at time of publication.
Data Source-Edwards Underground Water District and US Department of Commerce.

Figure 3.2 Precipitation trends for San Antonio, 1871 - 1993.



4.0 GROUNDWATER RECHARGE

The segment of the recharge zone that supplies groundwater to the San Antonio area of the Edwards aquifer extends from central Kinney County to central Hays County. Eight drainage basins cross the recharge zone of the aquifer (**Figure 4.1**). These basins are listed in **Table 4.1.**

Table 4.1 - Drainage basins which cross the Edwards aquifer recharge zone

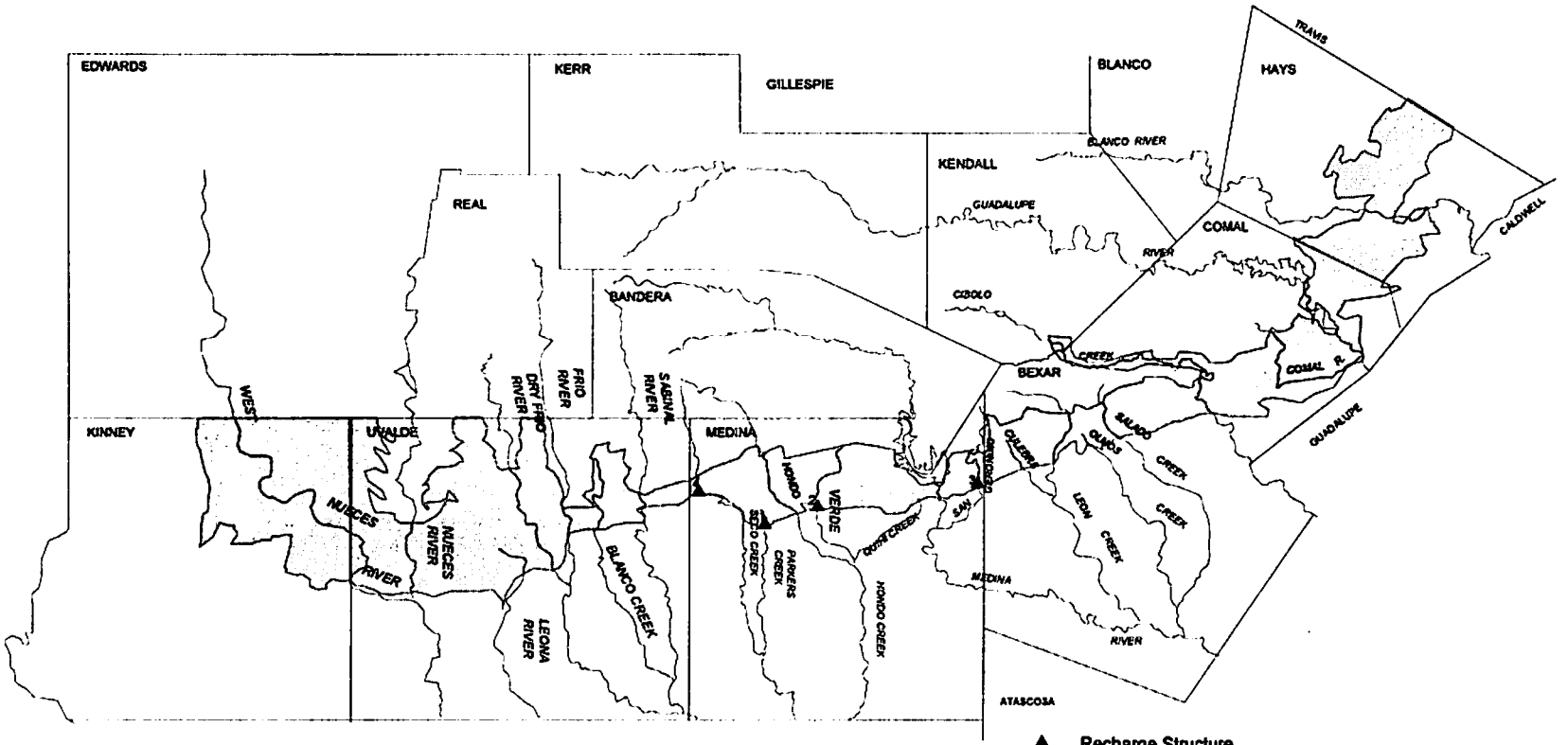
- Nueces-West Nueces River basin
- Frio-Dry Frio River basin
- Sabinal River basin
- Medina River basin
- Comal Creek basin
- Cibolo Creek and Dry Comal Creek basin
- Guadalupe River basin
- Blanco River basin

Although some recharge to the Edwards aquifer is provided by other hydraulically connected aquifers, this recharge has not been quantified. Only surface water data from precipitation and streamflow are utilized to calculate total recharge.

The USGS has been calculating groundwater recharge to the Edwards aquifer since 1934. **Table 4.2** shows annual recharge by river basin from 1934 through 1993, based on the USGS calculations.

The USGS has estimated that annual recharge for the period of record from 1934 to 1993, ranges from 43,700 acre-feet at the height of the drought in

Figure 4.1 The eight major drainage basins and Edwards Underground Water District recharge structures in the San Antonio area of the Edwards aquifer.



Primary Drainage Basins

- Nueces - West Nueces River Basin
- Frio-Dry Frio River Basin
- Sabinal River Basin
- Medina River Basin
- Comal Creek Basin
- Cibolo Creek and Dry Comal Creek Basin
- Guadalupe River Basin
- Blanco River Basin

Edwards Underground Water District Recharge Structures

Site Number	Name (Location)
1	Parker
2	Verde
3	San Geronimo
4	Seco

Table 4.2 Estimated annual groundwater recharge to the Edwards aquifer by river basin, 1934-1993. (Measurement in thousand acre-feet.)

Year	Nueces-West Nueces River basin	Frio-Dry Frio River basin	Sabinal River basin	Area between Sabinal River and Medina River basin	Medina River basin	Area between Medina River and Cibolo-Dry Comal Creek basin	Cibolo-Dry Creek basin	Blanco River basin	Total
1934	8.6	27.9	7.5	19.9	46.5	21.0	28.4	19.8	179.6
1935	411.3	192.3	56.6	166.2	71.1	138.2	182.7	39.8	1258.2
1936	176.5	157.4	43.5	142.9	91.6	108.9	146.1	42.7	909.6
1937	28.8	75.7	21.5	61.3	80.5	47.8	63.9	21.2	400.7
1938	63.5	69.3	20.9	54.1	65.5	46.2	76.8	36.4	432.7
1939	227.0	49.5	17.0	33.1	42.4	9.3	9.6	11.1	399.0
1940	50.4	60.3	23.8	56.6	38.8	29.3	30.8	18.8	308.8
1941	89.9	151.8	50.6	139.0	54.1	116.3	191.2	57.8	850.7
1942	103.5	95.1	34.0	84.4	51.7	66.9	93.6	28.6	557.8
1943	36.5	42.3	11.1	33.8	41.5	29.5	58.3	20.1	273.1
1944	64.1	76.0	24.8	74.3	50.5	72.5	152.5	46.2	560.9
1945	47.3	71.1	30.8	78.6	54.8	79.6	129.9	35.7	527.8
1946	80.9	54.2	16.5	52.0	51.4	105.1	155.3	40.7	556.1
1947	72.4	77.7	16.7	45.2	44.0	55.5	79.5	31.6	422.6
1948	41.1	25.6	26.0	20.2	14.8	17.5	19.9	13.2	178.3
1949	166.0	86.1	31.5	70.3	33.0	41.8	55.9	23.5	508.1
1950	41.5	35.5	13.3	27.0	23.6	17.3	24.6	17.4	200.2
1951	18.3	28.4	7.3	26.4	21.1	15.3	12.5	10.6	139.9
1952	27.9	15.7	3.2	30.2	25.4	50.1	102.3	20.7	275.5
1953	21.4	15.1	3.2	4.4	36.2	20.1	42.3	24.9	167.6
1954	61.3	31.6	7.1	11.9	25.3	4.2	10.0	10.7	162.1
1955	128.0	22.1	0.6	7.7	16.5	4.3	3.3	9.5	192.0
1956	15.6	4.2	1.6	3.6	6.3	2.0	2.2	8.2	43.7
1957	108.6	133.6	65.4	129.5	55.6	175.6	397.9	76.4	1142.6
1958	266.7	300.0	223.8	294.9	95.5	190.9	268.7	70.7	1711.2
1959	109.6	158.9	61.6	96.7	94.7	57.4	77.9	33.6	690.4
1960	88.7	128.1	64.9	127.0	104.0	89.7	160.0	62.4	824.8
1961	85.2	151.3	57.4	105.4	88.3	69.3	110.8	49.4	717.1
1962	47.4	46.6	4.3	23.5	57.3	16.7	24.7	18.9	239.4
1963	39.7	27.0	5.0	10.3	41.9	9.3	21.3	16.2	170.7
1964	126.1	57.1	16.3	61.3	43.3	35.8	51.1	22.2	413.2
1965	97.9	83.0	23.2	104.0	54.6	78.8	115.3	66.7	623.5
1966	169.2	134.0	37.7	78.2	50.5	44.5	66.5	34.6	615.2
1967	82.2	137.9	30.4	64.8	44.7	30.2	57.3	19.0	466.5
1968	130.8	176.0	66.4	198.7	59.9	83.1	120.5	49.3	884.7
1969	119.7	113.8	30.7	84.2	55.4	60.2	99.9	46.6	610.5
1970	112.6	141.9	35.4	81.6	68.0	68.8	113.8	39.5	661.6
1971	263.4	212.4	39.2	155.6	68.7	81.4	82.4	22.2	925.3
1972	108.4	144.6	49.0	154.6	87.9	74.3	104.2	33.4	756.4
1973	190.6	256.9	123.9	286.4	97.6	237.2	211.7	82.2	1486.5
1974	91.1	135.7	36.1	115.3	96.2	68.1	76.9	39.1	658.5
1975	71.8	143.6	47.9	195.9	93.4	138.8	195.7	85.9	973.0
1976	150.7	238.6	68.2	182.0	94.5	47.9	54.3	57.9	894.1
1977	102.9	193.0	62.7	159.5	77.7	97.9	191.6	66.7	952.0
1978	69.8	73.1	30.9	103.7	76.7	49.6	72.4	26.3	502.5
1979	128.4	201.4	68.6	203.1	89.4	85.4	266.3	75.2	1117.8
1980	58.6	85.6	42.6	25.3	88.3	18.8	55.4	31.8	406.4
1981	205.0	365.2	105.6	252.1	91.3	165.0	196.8	67.3	1448.3
1982	19.4	123.4	21.0	90.9	76.8	22.6	44.8	23.5	422.4
1983	79.2	85.9	20.1	42.9	74.4	31.9	62.5	23.2	420.1
1984	32.4	40.4	8.8	18.1	43.9	11.3	16.9	25.9	197.7
1985	105.9	186.9	50.7	148.5	64.7	136.7	259.2	50.7	1003.3
1986	188.4	192.8	42.2	173.6	74.7	170.2	267.4	44.5	1153.8
1987	308.5	473.3	110.7	405.5	90.4	229.3	270.9	114.9	2003.5
1988	59.2	117.9	17.0	24.9	69.9	12.6	28.5	25.5	355.5
1989	52.6	52.6	8.4	13.5	46.9	4.6	12.3	23.6	214.5
1990	479.3	255.0	54.6	131.2	54.0	35.9	71.8	41.3	1123.1
1991	325.2	421.0	103.1	315.2	52.8	84.5	109.7	96.9	1508.4
1992	234.1	586.9	201.1	566.1	91.4	290.6	286.6	226.9	2486.0
1993	32.6	78.5	29.6	60.8	78.5	38.9	90.9	37.8	447.6
For the period of record 1934-1993.									
Average	115.4	132.0	42.2	108.8	61.3	70.7	106.4	42.0	678.9
Median	89.3	104.5	30.9	80.1	56.45	52.8	78.7	34.1	556.95
For the period of record 1984-1993									
Average	181.8	240.5	62.6	185.7	66.7	101.5	141.4	68.8	1049.3
Median	147.2	189.9	46.5	139.9	67.3	61.7	100.3	42.9	1083.2
Maximum	479.3	586.9	223.8	566.1	104.0	290.6	397.9	226.9	2486.0
Minimum	8.6	4.2	0.6	3.6	6.3	2.0	2.2	8.2	43.7

Data Source: USGS, 1994.

1956, to 2,486,000 acre-feet in 1992. In 1993, estimated recharge was 447,500 acre-feet. The average annual recharge from 1934 to 1993 is 678,900 acre-feet, however since 1984, the ten year average annual recharge is estimated to be approximately 1,049,300 acre-feet. **Figure 4.2** is a graph of yearly recharge and the ten year floating average recharge estimate for the San Antonio area of the Edwards aquifer from 1934 to 1993.

Recharge directly affects groundwater levels in the aquifer. Water levels rise during years of higher than normal recharge, and generally decline during periods of normal to below normal recharge. Since recharge is a direct result of precipitation, water levels in the aquifer are greatly affected by rainfall.

The District operates four recharge dams across the Edwards aquifer recharge zone. The locations of the recharge structures are shown in **Figure 4.1.** These structures contributed approximately 842 acre-feet of recharge to the aquifer in 1993. **Table 4.3** shows the 1993 monthly recharge to the Edwards aquifer by each structure and **Table 4.4** shows the annual historical recharge recorded for each site since each dam was constructed.

Table 4.3 Monthly groundwater recharge at Edwards Underground Water District recharge projects for 1993. (Measured in acre-feet.)

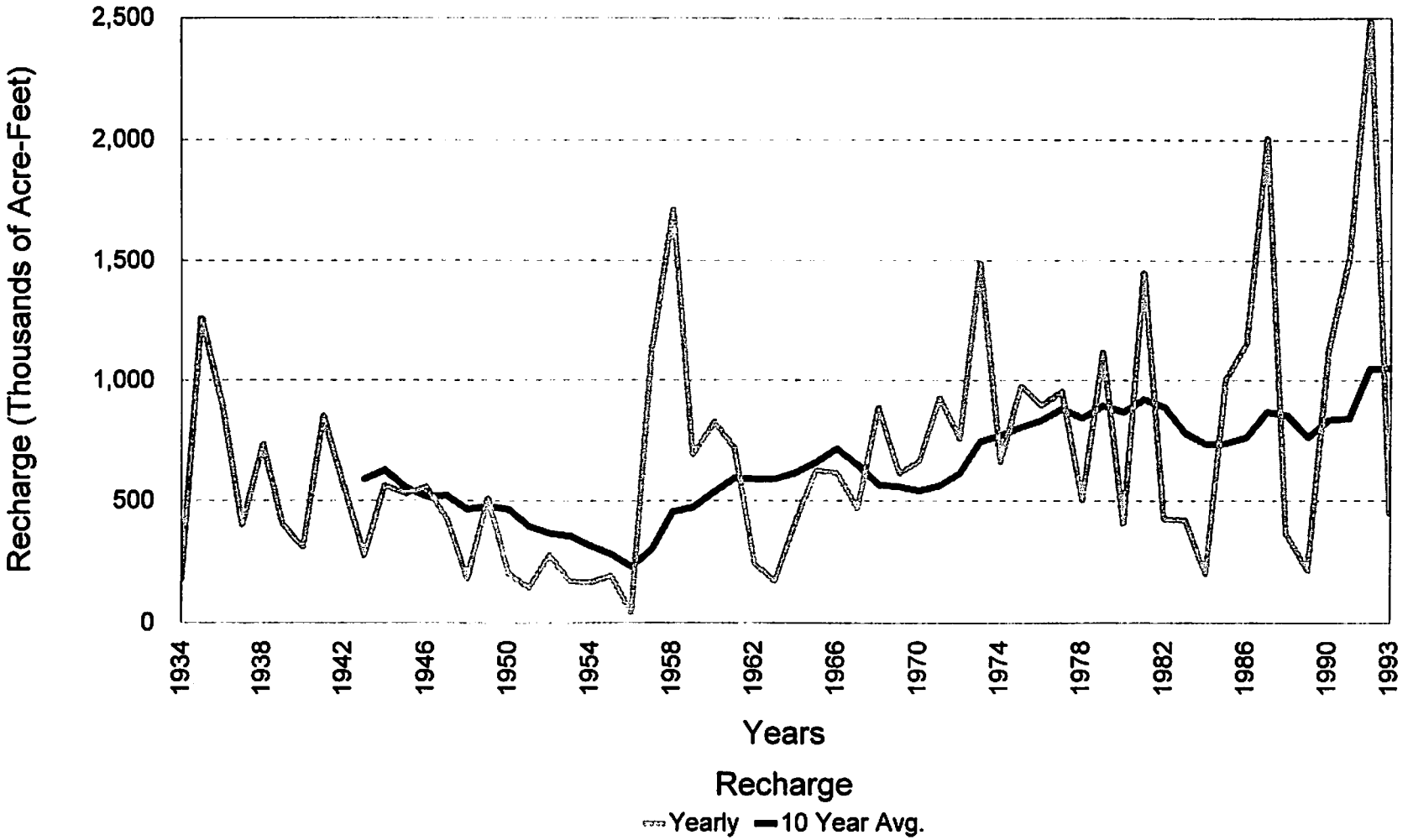
Month	Parker Creek Dam Permit No. 2802 Adjudication No. 3192	Verde Creek Dam Permit No. 3444	San Geronimo Creek Dam Permit No. 2956	Seco Creek Dam Permit No. 3551
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	16.9
May	0	0	333.5	491.4
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Total	0	0	333.5	508.3

Data Source: USGS and Edwards Underground Water District, 1994

Table 4.4 Estimated annual Edwards aquifer recharge from Edwards Underground Water District recharge projects. (Measured in acre-feet.)

Year	Parker (4-20-74)	Verde (4-28-78)	San Geronimo (11-13-79)	Seco (10-21-82)	Yearly Total Total
1974	160	—	—	—	160
1975	620	—	—	—	620
1976	2,018	—	—	—	2,018
1977	6	—	—	—	6
1978	98	150	—	—	248
1979	2,315	1,725	0	—	4,040
1980	0	371	903	—	1,274
1981	772	1,923	1,407	—	4,102
1982	3	112	91	0	206
1983	0	254	0	0	0
1984	251	246	0	143	640
1985	232	440	1,097	643	2,412
1986	217	889	963	1,580	3,649
1987	2,104	4,141	1,176	12,915	20,336
1988	0	0	0	0	0
1989	0	0	0	0	0
1990	49	176	41	479	745
1991	647	966	1,647	2,160	5,420
1992	723	2,775	2,874	14,631	21,003
1993	0	0	334	508	842
Total	10,215	14,168	10,533	33,059	67,975
Recharge					
Average	529	935	752	3,005	5,221
Median	217	371	619	508	842

Figure 4.2 Yearly recharge and ten year floating average recharge for San Antonio area of the Edwards aquifer, 1934-1993.



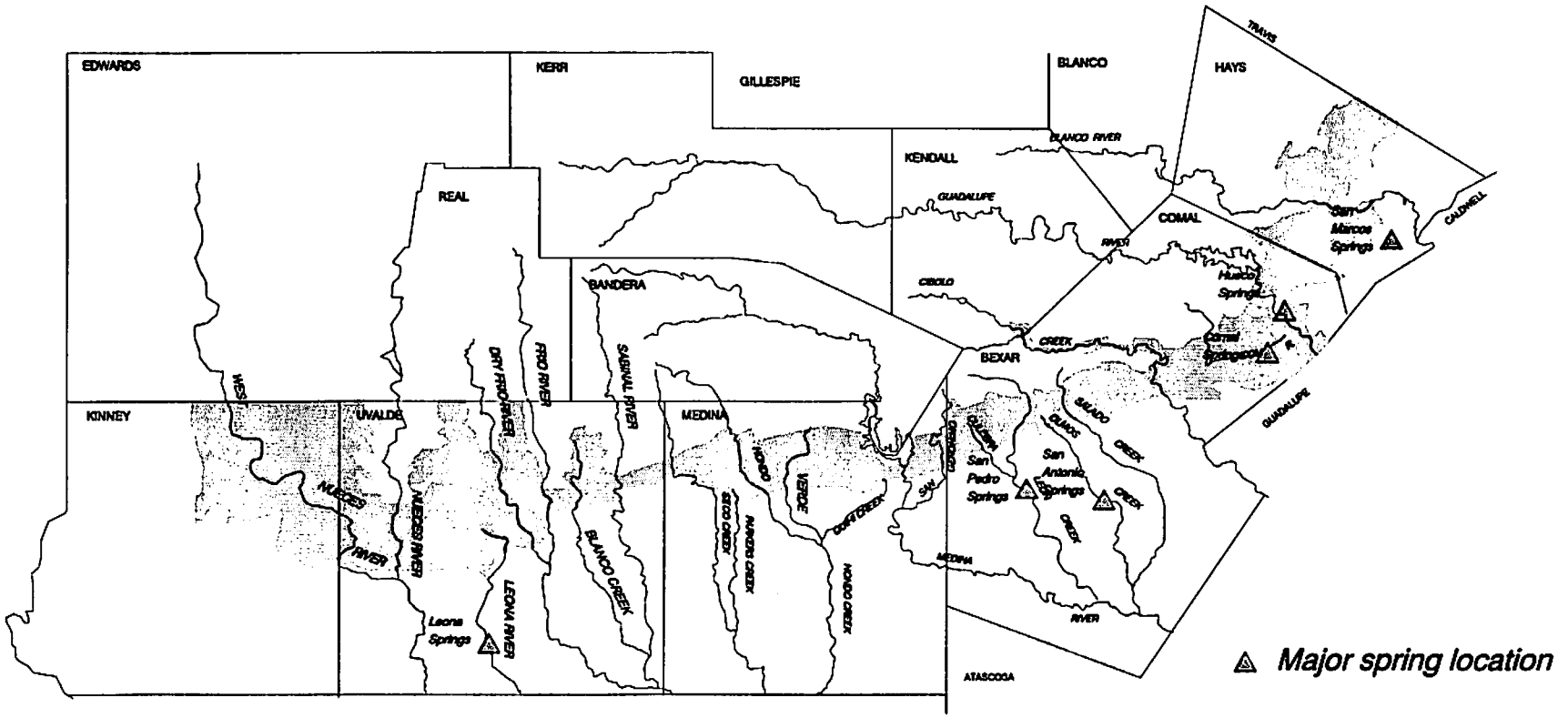
5.0 GROUNDWATER DISCHARGE AND USAGE

The Edwards aquifer provides water for many diverse uses in the south central Texas region, including agricultural, municipal, industrial, domestic and recreational needs. Natural springflow accounts for the majority of groundwater discharge when compared to any of the other above mentioned groups. This springflow supports recreational economies in New Braunfels and San Marcos, and provides habitat for several threatened and endangered animal and plant species.

Groundwater is discharged from the Edwards aquifer through springflow or by pumped or artesian flow from wells. Springflow is calculated by measuring the downstream flow from springs, or by measuring water levels in observation wells near the springs, and making corrections from these values.

Measuring downstream flow provides the most direct method in estimating springflow and is used in this report to determine springflow discharge. Downstream flow from springs is measured on a continuous basis and provides a detailed history of springflow discharge. A location map of the primary springs in the Edwards aquifer is shown in **Figure 5.1.**

Figure 5.1 Major springs in the San Antonio Area of the Edwards aquifer.



Indirectly calculating springflow by measuring groundwater levels in nearby observation wells is an alternative method of determining groundwater discharge. While the method is not as accurate as using downstream flow measurements, this method may be used to fill gaps in incomplete data sets when downstream recorders are not functioning.

Groundwater discharge resulting from pumping is calculated by tabulating reported water use data from public supply, irrigation, agricultural, industrial, commercial and domestic wells.

Estimates for annual groundwater discharge from springflow and pumping for the Edwards aquifer are available from 1934 to 1993 and range from the calculated low of 388,100 acre-feet in 1955, to the calculated high of 1,100,000 acre-feet in 1992. Springflow for the same period has varied from a low of 69,800 acre-feet in 1956 to a high of 802,800 acre-feet in 1992. In 1993, total groundwater discharge from the Edwards aquifer was approximately 996,700 acre-feet. **Table 5.1** contains annual estimated groundwater discharge data for the San Antonio area of the Edwards aquifer from 1934 to 1993.

Springflow from the Edwards aquifer for 1993 was calculated at 589,400 acre-feet. Springflow in the aquifer is directly related to groundwater levels.

Table 5.1 Annual estimated groundwater discharge data for wells and springs by county for the Edwards aquifer, 1934 - 1993. (Measured in thousands of acre-feet)

Year	Kinney Uvalde	Medina	Bexar	Comal	Hays	Total	Total Wells	Total Springs
1934	12.6	1.3	109.3	229.1	85.6	437.9	101.9	336.0
1935	12.2	1.5	171.8	237.2	96.9	519.6	103.7	415.9
1936	26.6	1.5	215.2	261.7	93.2	598.2	112.7	485.5
1937	28.3	1.5	201.8	252.5	87.1	571.2	120.2	451.0
1938	25.2	1.6	187.6	250.0	93.4	557.8	120.1	437.7
1939	18.2	1.6	122.5	219.4	71.1	432.8	118.9	313.9
1940	16.1	1.6	116.7	203.8	78.4	416.6	120.1	296.5
1941	17.9	1.6	197.4	250.0	134.3	601.2	136.8	464.4
1942	22.5	1.7	203.2	255.1	112.2	594.7	144.6	450.1
1943	19.2	1.7	172.0	249.2	97.2	539.3	149.1	390.2
1944	11.6	1.7	166.3	252.5	135.3	567.4	147.3	420.1
1945	12.4	1.7	199.8	263.1	137.8	614.8	153.3	461.5
1946	6.2	1.7	180.1	261.9	134.0	583.9	155.0	428.9
1947	13.8	2.0	193.3	256.8	127.6	593.5	167.0	426.5
1948	9.2	1.9	159.2	203.0	77.3	450.6	168.7	281.9
1949	13.2	2.0	165.3	209.5	89.8	479.8	179.4	300.4
1950	17.8	2.2	177.3	191.1	78.3	466.7	193.8	272.9
1951	16.9	2.2	166.9	150.5	69.1	425.6	209.7	215.9
1952	22.7	3.1	187.1	133.2	78.8	424.9	215.4	209.5
1953	27.5	4.0	193.7	141.7	101.4	468.3	229.8	238.5
1954	26.6	6.3	208.9	101.0	81.5	424.3	246.2	178.1
1955	28.3	11.1	215.2	70.1	64.1	388.8	261.0	127.8
1956	59.6	17.7	229.6	33.6	50.4	390.9	321.1	69.8
1957	29.0	11.9	189.4	113.2	113.0	456.5	237.3	219.2
1958	23.7	6.6	199.5	231.8	155.9	617.5	219.3	398.2
1959	43.0	8.3	217.5	231.7	118.5	619.0	234.5	384.5
1960	53.7	7.6	215.4	235.2	143.5	655.4	227.1	428.3
1961	56.5	6.4	230.3	249.5	140.8	683.5	228.2	455.3
1962	64.6	8.1	220.0	197.5	98.8	589.0	267.9	321.1
1963	51.4	9.7	217.3	155.7	81.9	516.0	276.4	239.6
1964	49.3	8.6	201.0	141.8	73.3	474.0	260.2	213.8
1965	46.8	10.0	201.1	194.7	126.3	578.9	256.1	322.8
1966	48.5	10.4	198.0	198.9	115.4	571.2	255.9	315.3
1967	81.1	15.2	239.7	139.1	82.3	557.4	341.3	216.1
1968	58.0	9.9	207.1	238.2	146.8	660.0	251.7	408.3
1969	88.5	13.6	216.3	218.2	122.1	658.7	307.5	351.2
1970	100.9	16.5	230.6	229.2	149.9	727.1	329.4	397.7
1971	117.0	32.4	262.8	168.2	99.1	679.5	406.8	272.7
1972	112.6	28.8	247.7	234.3	123.7	747.1	371.3	375.8
1973	96.5	14.9	273.0	289.3	164.3	838.0	310.4	527.6
1974	133.3	28.6	272.1	286.1	141.1	861.2	377.4	483.8
1975	112.0	22.6	259.0	296.0	178.6	868.2	327.8	540.4
1976	136.4	19.4	253.2	279.7	164.7	853.4	349.5	503.9
1977	156.5	19.9	317.5	295.0	172.0	960.9	380.6	580.3
1978	154.3	38.7	269.5	245.7	99.1	807.3	431.8	375.5
1979	130.1	32.9	294.5	300.0	157.0	914.5	391.5	523.0
1980	151.0	39.9	300.3	220.3	107.9	819.4	491.1	328.3
1981	104.2	26.1	280.7	241.8	141.6	794.4	387.1	407.3
1982	129.2	33.4	305.1	213.2	105.5	786.4	453.1	333.3
1983	107.7	29.7	277.6	186.6	118.5	720.1	418.5	301.6
1984	156.9	46.9	309.7	108.9	85.7	708.1	529.8	178.3
1985	156.9	59.2	295.5	200.0	144.9	856.5	522.5	334.0
1986	91.7	41.9	294.0	229.3	160.4	817.3	429.3	388.0
1987	94.9	15.9	326.6	286.2	198.4	922.0	364.1	557.9
1988	156.7	82.2	317.4	236.5	116.9	909.7	540.0	369.7
1989	156.9	70.5	305.6	147.9	85.6	766.5	542.4	224.1
1990	118.1	69.7	276.8	171.3	94.1	730.0	489.4	240.6
1991	76.6	25.6	315.5	221.9	151.0	790.6	436.0	354.6
1992	76.5	9.3	370.5	412.4	261.3	1130.0	327.2	802.8
1993	107.5	17.8	371.0	349.5	151.0	996.7	407.3	589.4
For period of record 1934-1993.								
Average	68.2	17.0	232.3	217.8	117.8	653.2	287.6	365.6
Median	55.1	10.0	216.8	229.25	114.2	616.2	260.6	372.6
For period of Record 1984-1993. (Ten years)								
Average	119.3	43.9	318.3	236.4	144.9	862.7	458.8	403.9
Median	112.8	44.4	312.6	225.6	148.0	836.9	462.7	382.2
For period of record 1984-1993. (Thirty years)								
Average	110.2	29.7	276.3	232.7	134.6	783.5	389.6	393.9
Median	109.9	25.9	277.2	229.3	133.7	792.5	383.9	372.6

Differences may occur due to rounding procedures.
Data Source - USGS, 1994.

Generally, the higher the water levels, the greater the springflow. Record-high groundwater levels and greater than normal precipitation in 1992 resulted in 1993 becoming the second highest year of spring discharge during the period of record. **Table 5.2** shows the monthly estimated discharge in 1993 for six primary Edwards aquifer springs.

Table 5.2 Estimated spring discharge from Edwards aquifer for 1993. (Measured in acre-feet)

Month	Comal Springs	San Marcos Springs	Hueco Springs	San Antonio Springs	San Pedro Springs	Leona Springs and Leona Springs Under flow	Total monthly discharge combining all springs
January	25,739	12,270	5,233	10,256	1,273	4,624	53,395
February	23,080	10,800	5,315	9,078	1,079	4,120	53,472
March	25,373	12,090	6,517	8,581	1,127	4,506	58,194
April	24,095	11,640	5,980	8,020	1,036	4,653	55,424
May	25,783	13,450	5,610	8,916	1,038	4,862	59,659
June	24,756	13,130	4,932	8,311	1,021	4,194	56,344
July	24,551	13,470	4,589	6,324	832	3,657	53,423
August	22,019	12,120	4,075	2,492	525	2,924	44,155
September	20,229	10,520	3,363	605	397	2,697	37,811
October	20,983	9,870	2,725	895	434	2,800	37,707
November	20,941	9,400	1,940	1,127	457	2,721	36,586
December	21,804	9,330	1,527	1,435	509	2,741	37,346
Total	279,354	138,100	51,804	66,040	9,728	44,499	589,400

Differences may occur due to rounding procedures.
Data Source - USGS, 1994.

Springflow accounted for 59% of total discharge from the Edwards aquifer in 1993. Underflow in the Leona Gravel Formation has been included in total discharge from Leona Springs.

Springflow can vary greatly from year to year and is dependent on precipitation and water levels in the aquifer. In addition, all groundwater pumping has progressively increased since records have been maintained. The lowest

estimated annual aquifer pumping level was 101,900 acre-feet as recorded in 1934. Since 1934, pumping from the Edwards aquifer has increased more than 400 percent. Average annual well production is estimated to be 287,600 acre-feet per year for the period of record from 1934 to 1993, while the estimated floating ten year average for pumping from 1984 to 1993, is 458,800 acre-feet. **Figure 5.2** is a graph comparing groundwater pumpage to springflow. **Figure 5.3** contains three charts showing the total distribution and percentage of groundwater discharged from the Edwards aquifer.

Groundwater pumping accounted for 407,300 acre-feet of water discharged from the Edwards aquifer in 1993. **Table 5.3** shows the 1993 discharge data by use for the six counties in the region. **Table 5.4** shows annual estimated Edwards aquifer groundwater discharge by use from 1955 to 1993.

Figure 5.2 Comparison of estimated groundwater pumpage to springflow for the San Antonio area of the Edwards aquifer, 1934 - 1993.

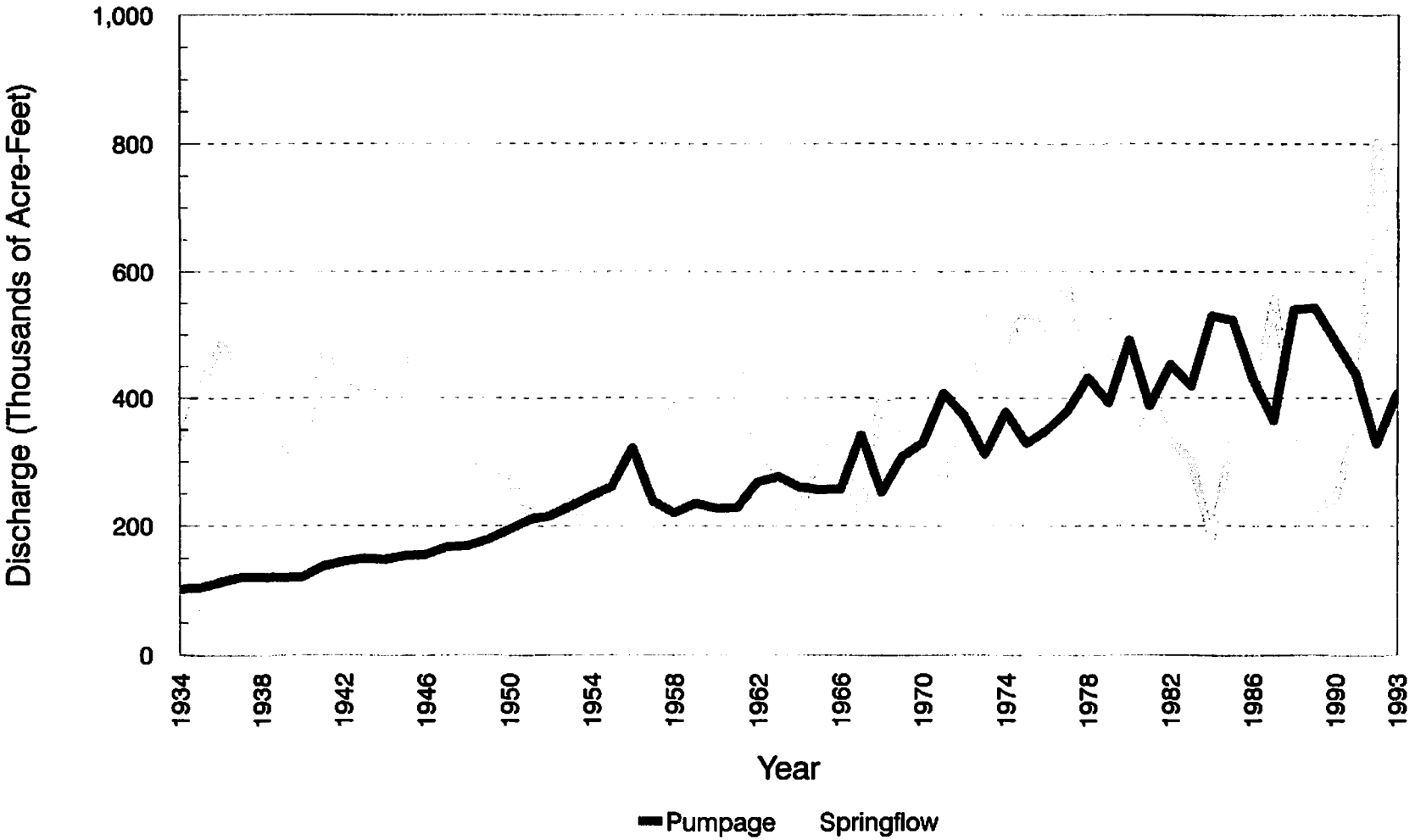
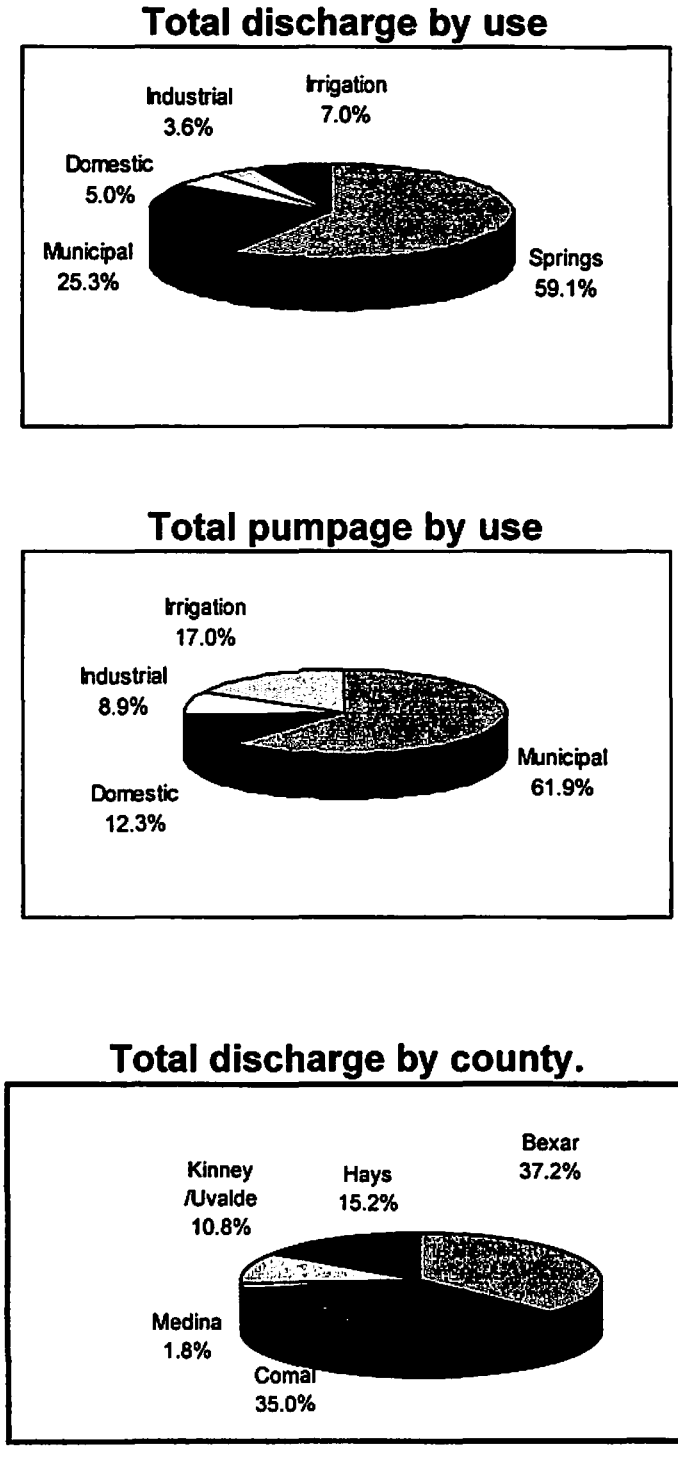


Figure 5.3 Percent Edwards aquifer groundwater discharge by use, 1993.



Data Source: Edwards Underground Water District and the USGS, 1994.

Table 5.3 Groundwater discharge from the Edwards aquifer for 1993. (Measured in thousand acre-feet - 1000 ac-ft/yr. and millions of gallons per year - mg/yr.)

County	Irrigation (mg/yr.)	Municipal /Military (mg/yr.)	Domestic /Stock (mg/yr.)	Industrial (mg/yr.)	Springs (mg/yr.)	Total mg/yr.	Total 1000 ac-ft/yr.
Bexar	1312.3	73,506.0	14,390.8	7003.4	24,670.3	120,882.8	371.0
Comal	73.0	1246.0	225.0	4431.9	107,895.7	113,871.6	349.5
Hays	36.5	3608.5	447.2	107.4	45,000.0	49,199.6	151.0
Medina	3744.1	1820.6	230.0	0	0	5794.7	17.8
Uvalde	17,235.4	1629.1	895.9	215.1	14491.1	34,466.6	105.8
Kinney	182.5	288.1	73.0	--	--	543.6	1.7
Total (mg/yr.)	**22,583.8**	**82,098.4**	**16,261.9**	**11,757.8**	**192,057.1**	**324,7510.0**	
Total (1000 ac-ft/yr.)	**69.3**	**252.0**	**49.9**	**36.1**	**589.4**		**996.7**

Differences may occur due to rounding procedures.
Data Source - USGS, 1994.

Table 5.4 Annual estimated Edwards aquifer groundwater discharge by use, 1955 - 1993. (Measured in thousands of acre-feet.)

Year	Irrigation	Municipal	Domestic & Stock	Industrial Commercial	Springs
1955	76.1	107.6	26.9	22.4	114.1
1956	113.6	123.5	25.8	20.0	66.1
1957	61.4	103.7	26.6	20.7	195.7
1958	42.1	101.5	29.8	22.4	355.5
1959	53.6	106.2	20.1	21.6	343.2
1960	49.0	108.1	26.0	20.8	381.3
1961	46.5	111.2	26.4	19.8	406.4
1962	64.9	128.3	25.7	20.4	286.6
1963	75.4	115.8	27.8	21.8	239.6
1964	72.8	140.6	26.4	21.8	213.8
1965	68.0	138.8	27.0	23.3	322.8
1966	68.2	141.8	23.3	22.6	315.3
1967	79.4	171.0	25.1	25.8	216.1
1968	59.3	146.9	25.5	20.0	408.3
1969	95.2	162.0	29.2	21.1	351.2
1970	110.1	167.5	34.6	22.5	397.7
1971	159.4	196.2	28.6	22.6	272.7
1972	128.8	190.5	30.8	21.1	375.8
1973	82.2	177.1	32.3	18.8	527.6
1974	140.5	174.6	33.5	15.1	483.8
1975	96.4	182.5	33.6	15.3	540.4
1976	118.2	182.1	34.6	14.7	503.9
1977	124.2	205.3	38.1	13.0	580.3
1978	165.8	214.2	40.3	11.5	375.5
1979	126.8	208.9	40.7	15.2	523.0
1980	177.9	256.2	43.3	13.7	328.3
1981	101.8	231.8	40.9	12.6	407.3
1982	130.0	268.6	39.5	15.0	333.3
1983	115.9	249.2	38.8	14.7	301.5
1984	191.2	287.2	36.2	15.2	172.5
1985	203.1	263.7	39.2	16.5	334.0
1986	104.2	266.3	42.0	16.8	405.3
1987	40.9	260.9	43.5	18.7	576.3
1988	193.1	286.2	41.9	18.8	386.5
1989	196.2	285.2	38.2	22.9	224.1
1990	172.9	254.9	37.9	23.7	240.6
1991	88.5	240.5	39.5	67.5	354.3
1992	27.1	236.5	34.8	29.0	802.8
1993	69.3	252.0	49.9	36.1	589.4
Average (1955-1993)	104.9	190.9	33.4	20.9	365.5
Median (1955-1993)	96.4	182.5	33.6	20.4	354.3
Average (1983-1993)	127.5	262.1	40.2	25.4	398.8
Median (1983-1993)	115.9	260.9	39.2	18.8	354.3

Differences may occur due to rounding procedures.
Data Source - USGS and Edwards Underground Water District, 1994.

6.0 WATER QUALITY

The District, in cooperation with the USGS and the Texas Water Development Board (TWDB), has conducted a systematic program of water quality data collection since 1968. Through this cooperative effort, the District has monitored and maintained a network of wells, springs, and stream gauging stations across the entire area of the Edwards aquifer. Analyses of this data have been used by the District to determine changes in aquifer water quality. A bulletin has been published annually by the District and the USGS to report the results from the sample analyses obtained from the data collection network.

In 1993, USGS and the District collected water quality samples from 60 wells and three springs. The location of these wells and springs are shown in **Figure 6.1.** These samples were analyzed for 88 constituents and parameters. The analyses included common organic constituents, nutrients, dissolved organic carbon, metals, and volatile organic compounds. Typical standards for these parameters are listed in **Table 6.1.** Laboratory analyses indicated that two wells, AY-68-27-303 and AY-68-42-806, contained levels of iron above the secondary Maximum Contaminant Level (MCL). Secondary MCLs are non-enforceable taste, odor, or appearance guidelines. One well, AY-68-28-205, had a concentration of manganese above the secondary MCL. In addition, 11 out of 191 samples contained detectable concentrations of metals (**Appendix 10.2**).

Figure 6.1 Edwards Underground Water District water quality monitoring sites sampled in 1993.

County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number
Uvalde	YP 69-43-603	Bexar	AY 68-27-303	Bexar	AY 68-29-410	Comal	DX 68-15-901	Comal	DX 68-23-618
	YP 69-45-404		AY 68-28-203	(continued)	AY 68-29-702		DX 68-16-502	(continued)	DX 68-23-619A
	YP 69-45-405		AY 68-28-205		AY 68-36-102		DX 68-22-901		DX 68-23-619B
	YP 69-50-203		AY 68-28-501		AY 68-37-521		DX 68-22-902		
	YP 69-50-207		AY 68-28-508		AY 68-37-522		DX 68-23-301	Hays	LR 58-57-311
	YP 69-50-501		AY 68-28-904		AY 68-37-523		DX 68-23-305		LR 58-58-403
	YP 69-50-506		AY 68-28-905		AY 68-37-524		DX 68-23-316		LR 67-01-302
	YP 69-51-102		AY 68-28-913		AY 68-37-525		DX 68-23-602		LR 67-01-308
	YP 69-51-114		AY 68-28-919		AY 68-37-526		DX 68-23-618A		LR 67-01-601
			AY 68-29-109		AY 68-37-527		DX 68-23-618B		LR 67-01-602
Medina	TD 68-41-303		AY 68-29-303		AY 68-37-705		DX 68-23-617		LR 67-01-606
	TD 68-42-606		AY 68-29-401						LR 67-09-111
	TD 69-46-601								
	TD 69-47-303								

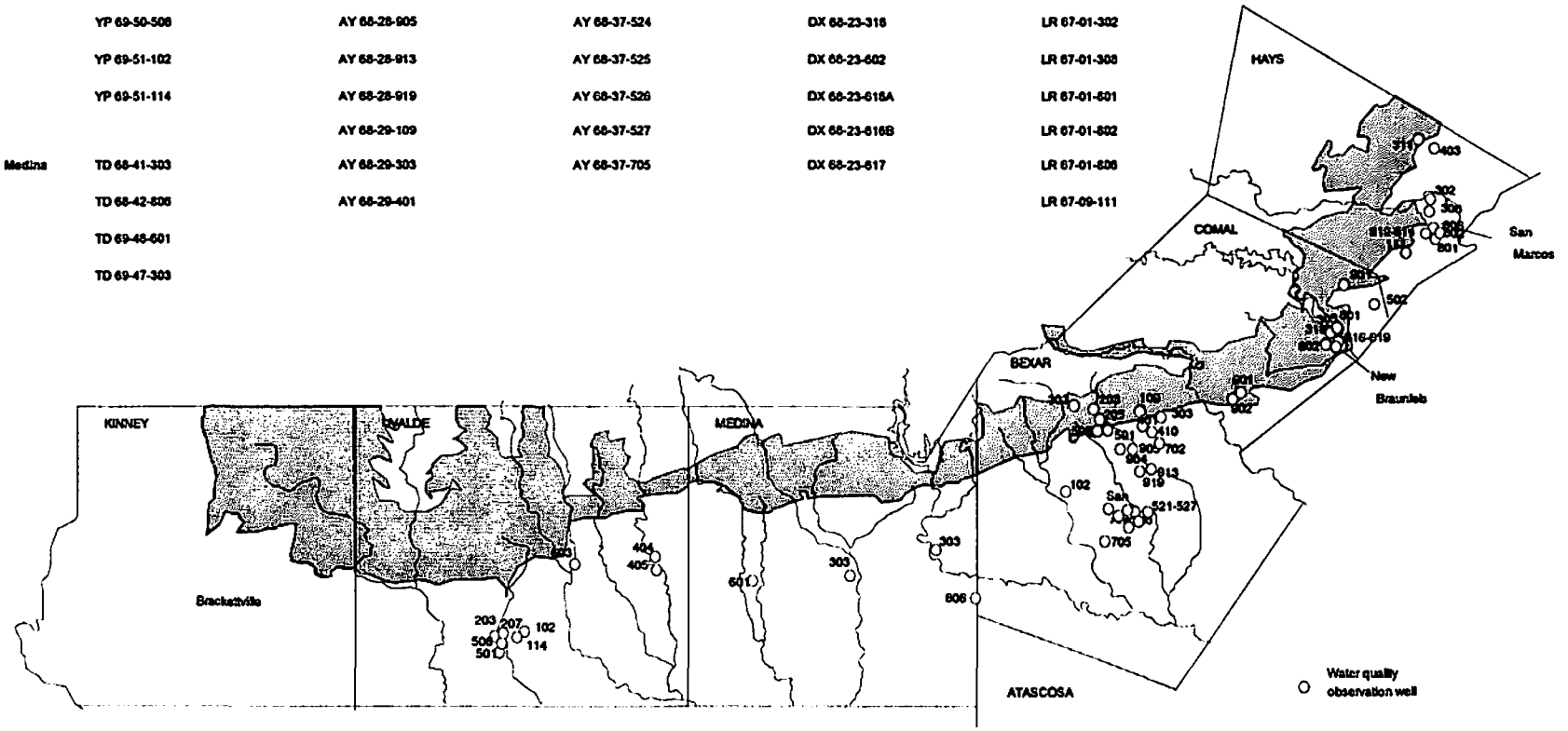


Table 6.1 - Groundwater Quality Standards

Parameter	Current Maximum or Secondary Contaminant Levels	"Edwards Aquifer Typical Result"
pH	-	6.5-8.0
Hardness (mg/L)	-	250-300
Non-carbonate hardness	-	20-50
Calcium (Ca) (mg/L)	-	80-120
Magnesium (Mg) (mg/L)	-	10-20
Sodium (Na) (mg/L)	-	3-10
Potassium (K) (mg/L)	-	1-2
Bicarbonate (CO_3)	-	250-400
Carbonate (CO3) (mg/L)	-	0
Sulfate (SO4) (mg/L)	250*	10-30
Chloride (Cl) (mg/L)	250*	10-30
Fluoride (F) (mg/L)	4	0.1-0.5
Dissolved Solids (mg/L)	500*	250-450
Silica (SiO2) (mg/L)	-	10-20
Nutrients		
Total Nitrate Nitrogen (mg/L)	10	0-0.1
Total Nitrite Nitrogen (mg/L)	-	0-0.1
Total Ammonia Nitrogen (mg/L)	0.5	
Total Phosphorus (mg/L)	-	
Bacteria & Biological Parameters		
Biochemical Oxygen Demand	-	0-1
Total Organic Carbon	-	1-5
Detergents (MBAS)	-	0-0.1
Total Coliform (colonies/100ml)	10,000 (Raw water for drinking water supplies)	0-5000
Fecal Coliform (colonies/100ml)	2,000 (Raw water for drinking water supplies)	0-150
Fecal Streptococci	-	
Metals		
Arsenic (As) (µg/L)	50	0-2
Cadmium (Cd) (µg/L)	5	0-1
Chromium (Cr) (µg/L)	100	0-15
Copper (Cu) (µg/L)	1000*	0-40
Iron (Fe) (µg/L)	300*	0-500
Lead (Pb) (µg/L)	50	0-10
Manganese (Mn) (µg/L)	50*	0-50
Mercury (Hg) (µg/L)	2	0-1.5
Zinc (Zn) (µg/L)	5000*	0-2000
Nickel (Ni) (µg/L)	-	0-4

Table 6.1 (Continued)

Parameter	Current Maximum or Secondary Contaminant Levels	"Edwards Aquifer Typical Result"
Pesticides		
Aldrin (µg/L)	1	0
Chlordane (µg/L)	3	0
DDD (µg/L)	-	0
DDE (µg/L)	-	0
DDT (µg/L)	50	0
Heptachlor (µg/L)	0.1	0
Heptachlor epoxide (µg/L)	-	0
Lindane (µg/L)	0.2	0
Mirex (µg/L)	-	0
Toxaphene (µg/L)	3	0
Diazinon (µg/L)	-	0
Ethion (µg/L)	-	0
Malathion (µg/L)	-	0
Methyl Parathion (µg/L)	-	0
Methyl Trithion (µg/L)	-	0
Parathion (µg/L)	-	0
Trithion (µg/L)	-	0
2, 4D (µg/L)	70	0
2, 4-DP (µg/L)	-	0
2, 4, 5-T (µg/L)	2	0
Silvex (µg/L)	50	0
PCB (µg/L)	-	0
Endosulfan (µg/L)	-	0
Ethyl trithion (µg/L)	-	0
Perthane (µg/L)	-	0
Toxaphene (µg/L)	-	0

* - Secondary Maximum Contaminant Level

Data Source - EPA maximum contaminant levels, 1993.

Concentrations are well below the MCLs for the constituents. Samples from 25 wells were analyzed for pesticides in 1993. No detectable concentrations of pesticides were measured in the wells sampled in 1993.

MCLs for nine volatile organic compounds are given in **Table 6.2**. MCLs are established by the US Environmental Protection Agency (EPA), and are enforceable federal standards. Volatile organic compounds (VOCs) were detected in one well, LR-67-01-302; however, at levels below the MCLs for the contaminants (noted in **Appendix 10.2**). VOC concentrations at levels ranging from 0.2 to 0.3 micrograms/liter (very low concentrations and below the MCLs) were encountered in two other wells sampled in 1993 (noted in **Appendix 10.2**). While these levels are detectable, they are well below the limits set by current EPA drinking water standards.

Table 6.2 Volatile Organic Compounds.

Parameter	Maximum Contaminant Level	"Edwards Aquifer Typical Result"
Benzene (µg/L)	5	0
Carbon tetrachloride (µg/L)	5	0
1, 4-Dichlorobenzene (µg/L)	75	0
1, 2-Dichloroethane (µg/L)	5	0
1, 1-Dichloroethylene (µg/L)	7	0
Tetrachloroethylene (µg/L)	5	0
1, 1, 1-Trichloroethane (µg/L)	200	0
Trichloroethylene (µg/L)	5	0
Vinyl Chloride (µg/L)	2	0

Source - EPA maximum contaminant levels, 1993.

Overall, results of the 1993 water quality sampling and analysis program illustrate the continued excellent quality of water in the Edwards aquifer. The classification of groundwater quality is based on the concentration of minerals dissolved in water, termed total dissolved solids (TDS), as shown in **Table 6.3.**

Table 6.3 Classification of groundwater quality based on TDS.

Description	TDS Concentration (mg/L)
Fresh	Less than 1,000
Slightly saline	1,000 to 3,000
Moderately saline	3,000 to 10,000
Very saline	10,000 to 35,000
Brine	More than 35,000

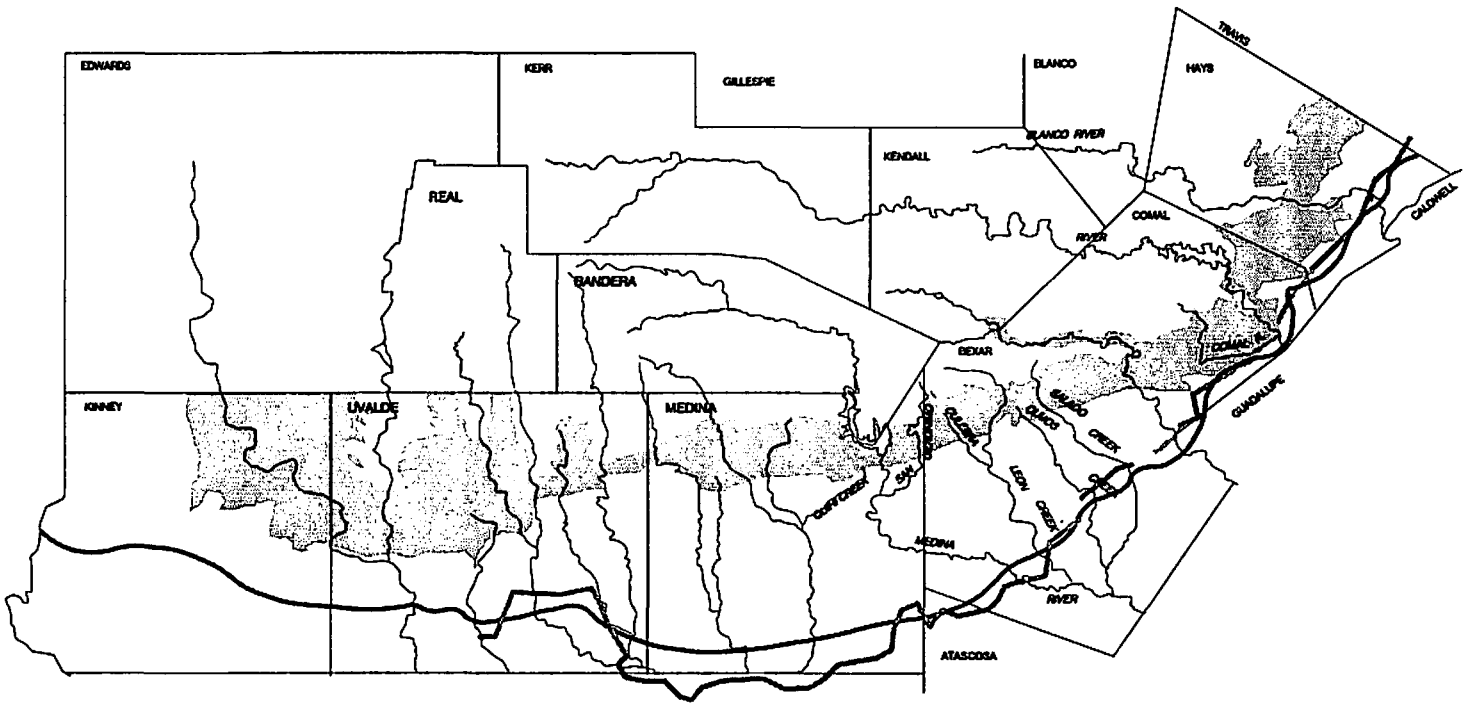
Source - Winslow and Kister, 1956.

A transitional freshwater/saline-water interface (formerly called the bad water line), defined by TDS values greater than 1000 mg/L, represents the downdip hydrologic boundary of the Edwards aquifer. Water updip from this arbitrary boundary is considered to be fresh potable water. South and southeast of the interface, water from the aquifer is slightly to moderately saline, and contains moderate to large concentrations of dissolved chloride and sulfate. The interface varies both laterally and vertically, as determined in several wells near the boundary. In some of these wells, fresh water has been encountered in the upper portion and saline water in the lower portion of the Edwards aquifer. Other

wells along the interface have encountered the opposite vertical distribution with saline-water zones overlying freshwater zones.

Two District studies were completed in 1993 to evaluate the position of the freshwater/saline-water interface. One study by Alvin L. Schultz, "Defining the Edwards Aquifer Freshwater/Saline-Water Interface with Geophysical Logs and Measured Data (San Antonio to Kyle, Texas)", was conducted to update the location of the interface from San Antonio northeastward to Kyle, Texas. This study, which extended the work conducted by A. Schultz in 1992 "Using Geophysical Logs in the Edwards Aquifer to Estimate Water Quality Along the Freshwater/Saline-Water Interface (Uvalde to San Antonio, Texas)" in the western portion of the aquifer, utilized geophysical log data to calculate water quality values for TDS. The calculated data combined with available measured water quality data from the area indicates that the freshwater/saline-water interface northeast of San Antonio was determined to be controlled predominantly by the Balcones Fault Zone, which downdrops portions of the aquifer to the southeast. While small segments of the interface were located further north than previously mapped, generally the position of the interface was consistent with previous mapping. The position of the interface, as determined by this study, can be seen in **Figure 6.2**.

Figure 6.2 Edwards aquifer freshwater/saline-water interface.

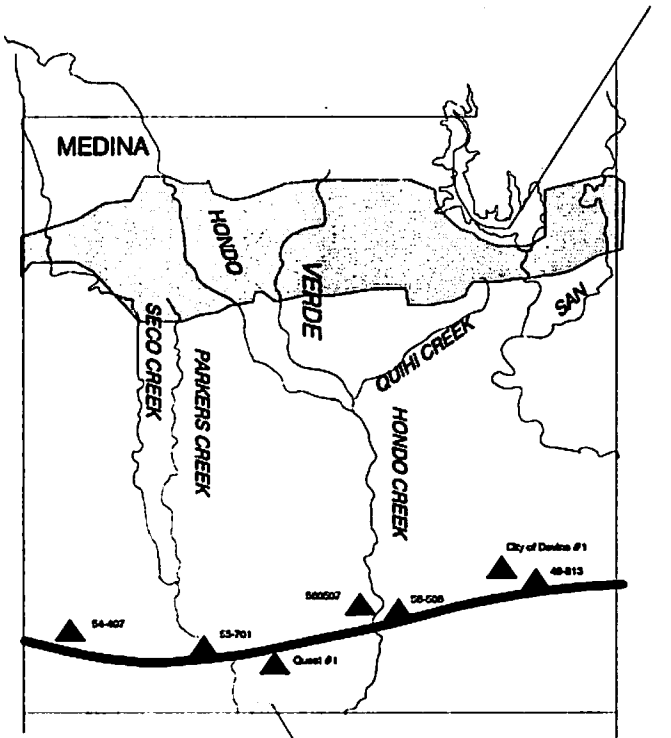


Results of Schultz's 1992 study indicated that the freshwater/saline-water interface was further south than previously mapped in western Medina County. An Edwards aquifer observation well was completed in 1993 at a total depth of 3410 feet, in order to evaluate the results of Schultz's 1992 study. The District drilled the well and tested the Edwards aquifer at a location in Medina County approximately 3.5 miles south of the previously mapped interface (**Figure 6.3**). The well encountered fresh water throughout the entire thickness of the aquifer.

A total of ten flow tests and two packer tests were conducted at the test well site to evaluate hydrogeologic parameters and water quality in various discrete zones of the aquifer (**Table 6.4**). The results of analyses of the test data from this well are being used to re-calibrate the calculated water quality data in the western portion of the aquifer area. The well is being equipped as a long-term monitoring well for water quality and aquifer level evaluation near the freshwater/saline-water interface.

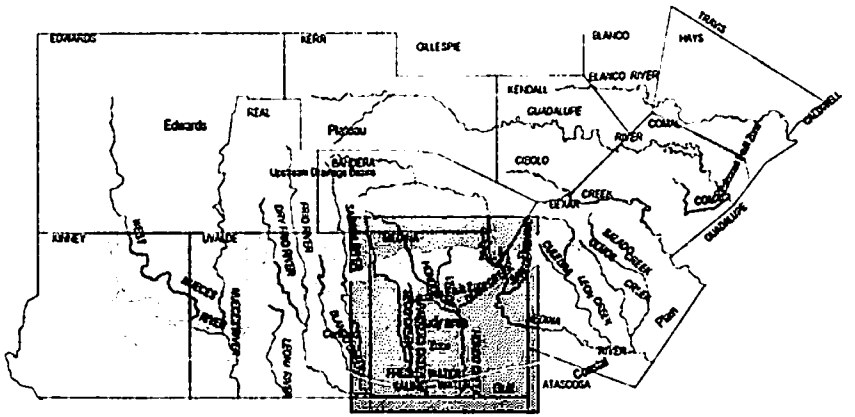
Wells adjacent to the freshwater/saline-water interface have been monitored for possible water quality changes by the District, USGS, San Antonio Water Systems, Texas Water Development Board and other entities since the early 1960's. Various reports have theorized that during periods of drought and corresponding low aquifer levels, water quality could deteriorate in wells in close proximity to the interface, due to saline water encroachment updip into the

Figure 6.3 South Medina County water quality monitoring wells.



South Medina County test well.

Freshwater/saline-water interface (Modified from Puente, 1978)



Location Map

Table 6.4 Water quality data - flow tests and packer tests, south Medina County observation well, 1993.

Test	Test Interval (ft)	shut-in Press (psi)	Temp. (°C)	Cond. (µS/cm)	TDS (mg/L)
Flow Test 1	2623-2822	40.5	39	796	466
Flow Test 2	2623-2932	--	--	575	312
Flow Test 3	2623-2978	42	43	515	313
Flow Test 4	2623-3043	43	43	527	368
Flow Test 5	2623-3104	47	43.5	539	--
Flow Test 6	2623-3168	47	43.5	559	410
Flow Test 7	2623-3231	48.5	43.5	481	359
Flow Test 8	2623-3291	45.5	44.5	448	363
Flow Test 9	2623-3356	46	45	477	349
Flow Test 10	2623-3410	--	44	473	351
PKR1-Upper	2673-3042	51	40	417	226
PKR1-Lower	3042-3231	45.5	40	453	340
PKR2-Upper	2623-3230	51	44	474	374
PKR2-Lower	3230-3410	47.3	42	447	298
Final Flow	2623-3410	51	44	462	354

freshwater portion of the aquifer. The possibility of saline water encroachment and the subsequent deterioration of water quality in the aquifer led to the development of the three water quality monitor well transects across the freshwater/saline-water interface by the District and the USGS with the cooperation of local entities. These transects are located at San Marcos, New Braunfels and San Antonio.

Table 6.5 consists of water quality data compiled from transect wells in San Antonio and New Braunfels. These wells have been sampled on a monthly basis since the 1980's. Data from the San Antonio transect well, AY-68-37-526, extends back to 1986, and includes the drought period of 1988 to 1989

represented by lower than normal water-levels in well J-17, the Bexar County index well.

Figure 6.4 illustrates that normal changes in the aquifer water-level have little effect on water quality in these wells, which are directly adjacent to the freshwater/saline-water interface. The data suggest, however, that if water levels approach record lows, there may be a slight degradation of water quality in specific wells immediately adjacent to the interface. **Table 6.5** and in **Figure 6.4** show that when the water-level in well J-17 was below 630 feet, and specific conductance values rose slightly in transect well AY-68-37-526.

Since 1968 the District, in cooperation with the USGS, has monitored water quality in the Edwards aquifer. Water quality data from these monitoring activities have been presented in various bulletins and reports with detectable concentrations of certain contaminants noted. A short background on several of these contaminants and their significance and potential health effects follows.

Lead - Lead is a highly toxic metal. Exposure to lead in high concentrations can cause anemia, kidney damage and mental retardation. High levels of lead in the blood can delay physical and mental development in infants, and can impair mental abilities in children. It is also classified by the EPA as a probable human carcinogen.

Figure 6.4 Water quality changes in San Antonio and New Braunfels transect wells compared to water levels in J-17 (Bexar County index well), 1988 - 1993.

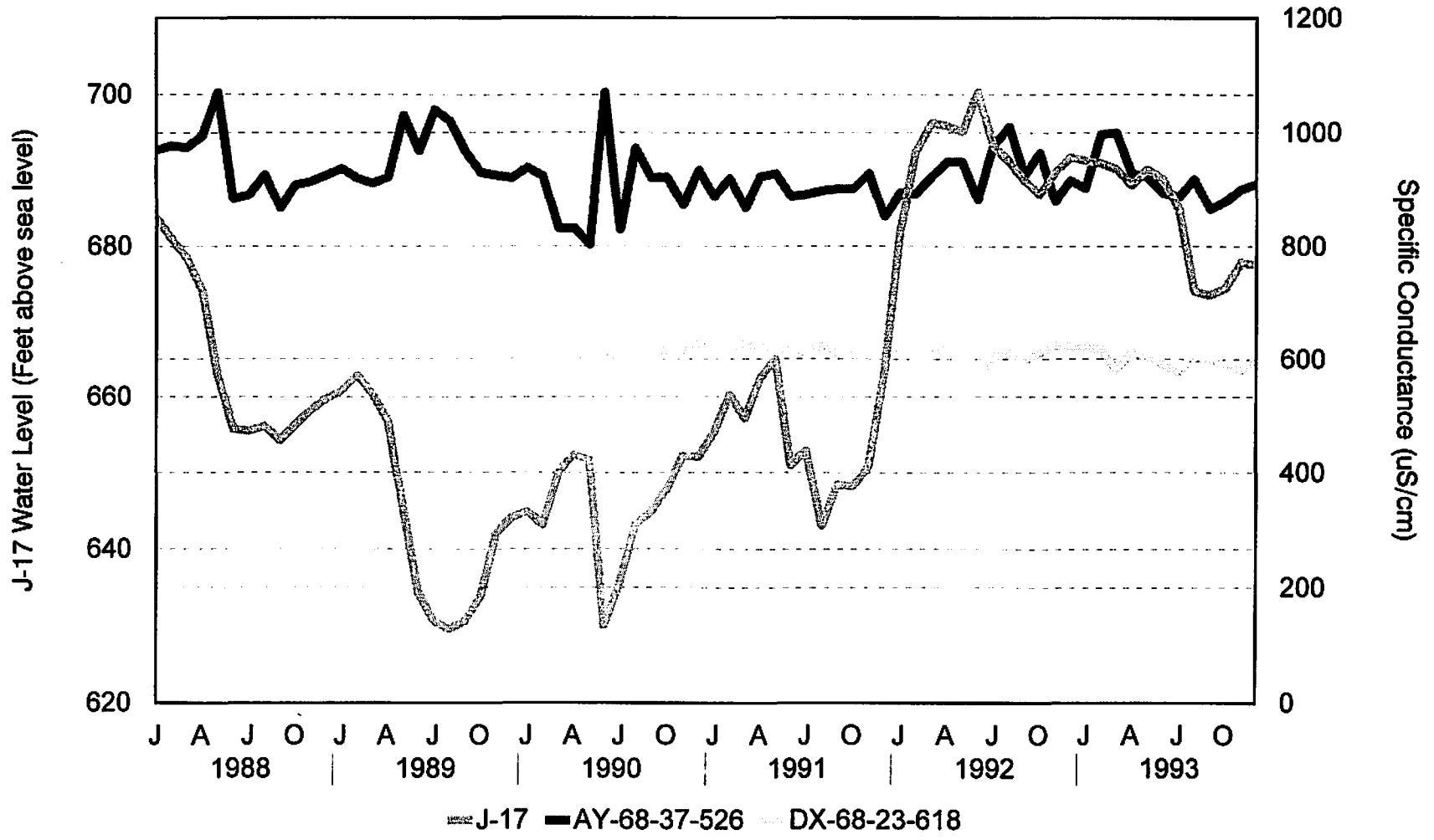


Table 6.5 Water quality data compiled from transect wells in San Antonio and New Braunfels reported as conductivity values as compared to water-levels at Bexar County index well (J-17, Dodd Field).

Month	Bexar County index well (feet above sea level)	San Antonio AY-68-37-526 (D-1) (µS/cm)	New Braunfels DX-68-23-618 (µS/cm)
January 1988	683.78	969	---
February	681.07	977	---
March	678.51	974	---
April	674.11	994	---
May	662.87	1070	---
June	655.72	884	---
July	655.48	891	---
August	656.08	926	---
September	654.21	868	---
October	656.35	908	---
November	658.20	914	---
December	659.72	925	---
January 1989	660.77	937	---
February	662.85	920	---
March	660.36	911	---
April	656.83	922	---
May	645.20	1030	---
June	634.26	968	---
July	630.66	1040	---
August	629.59	1020	---
September	630.66	967	---
October	633.79	930	---
November	641.96	---	---
December	644.11	920	---
January 1990	644.91	939	556
February	643.15	924	---
March	650.01	832	---
April	652.39	832	---
May	651.68	803	625
June	630.16	1070	---
July	635.59	830	605
August	643.21	973	---
September	644.88	921	605
October	647.90	922	617
November	652.17	873	616
December	652.09	934	627
January 1991	655.34	888	630
February	660.34	920	615
March	657.15	868	627
April	662.48	923	622
May	665.10	928	619
June	651.02	888	617
July	652.97	891	611
August	643.06	898	626
September	648.47	901	610
October	648.19	---	619
November	650.75	929	612
December	663.34	853	623
January 1992	682.19	895	616
February	692.44	892	604
March	696.31	922	610
April	695.92	949	621
May	695.13	---	606
June	700.34	882	570
July	693.25	978	606
August	691.17	1010	610
September	688.67	925	598
October	686.88	965	---
November	689.74	880	624

Table 6.5 (Continued)

Month	Bexar County index well (feet above sea level)	San Antonio AY-68-37-526 (D-1) (µS/cm)	New Braunfels DX-68-23-618 (µS/cm)
December	691.77	916	---
January 1993	691.29	902	620
February	690.98	997	618
March	690.22	1000	580
April	688.10	928	612
May	690.20	923	603
June	688.88	894	---
July	684.90	888	577
August	674.04	918	602
September	673.55	866	600
October	674.48	---	---
November	677.90	900	580
December	677.56	910	600

Data Source: Edwards Underground Water District, 1994.

Lead occurs in drinking water primarily as a result of corrosion of pipes and other plumbing materials. Lead levels are monitored in public drinking water systems on a regular basis by the TNRCC. The minimum detection limit for lead in water quality sample analysis is 0.01 µg/L, and the maximum contaminant level (MCL) is 15 µg/L. Detectable concentrations of lead in Edwards wells are predominantly found in or near the saline portion of the aquifer, where corrosion of casing and pumping equipment occurs rapidly. Lead has also been detected in monitor wells adjacent to closed landfills and industrial sites. As of 1993, no significant recurring levels of lead exceeding the MCL have been found in the Edwards aquifer region.

Mercury - Mercury is known to cause damage to the central nervous system, and is a known human carcinogen. It occurs naturally in groundwater associated with highly mineralized fluids in the vicinity of volcanic activity, or due to geothermal heating of deep brines. Mercury is also used in some batteries,

paints, pesticides and some electrical components, and therefore can possibly be detected in the vicinity of landfills and manufacturing sites that produced these items. The MCL for mercury is 2 μg/L. The minimum detection limit is 0.01 μg/L. The primary occurrences of detectable concentrations of mercury have been found in saline-water wells and monitor wells used to investigate abandoned landfills and industrial sites in Bexar County. No detectable concentrations of mercury were measured during the 1993 sampling program.

Volatile Organic Chemicals (VOCs) - At least five of the chemicals on this list are known or suspected carcinogens when ingested by humans. These include benzene, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene (TCE), and vinyl chloride. Several other VOCs are regulated based on chronic toxicity.

These chemicals occur as byproducts of industrial activity, primarily used as solvents or cleaning agents in industrial processes. Because of their toxicity, MCLs for these contaminants are very low, ranging from 2 to 5 μg/L for most of the VOCs. Minimum detection levels for VOCs predominantly range from 0.01 to 0.03 μg/L.

Occurrences of significant detectable concentrations of VOCs have been uncommon in the Edwards aquifer. Specific sites of former industrial and landfill activity in Uvalde and Bexar counties have been investigated by the District, as

well as other local, state and federal agencies. No new reported instances of VOC contamination have been investigated by District staff during 1993.

Secondary Drinking Water Standards - These standards are non-enforceable and are set for contaminants that may affect the aesthetic qualities of drinking water, such as odor or appearance. **Table 6.6** is a list of the current secondary standards. While these contaminants are not considered to affect public health, their presence can result in an adverse effect on public welfare.

Table 6.6 Secondary drinking water standards.

Contaminant	Secondary Maximum Contaminant Level (SMCL) (mg/L)
Aluminum	0.05-0.2
Chloride	250
Color	15 color units
Corrosivity	noncorrosive
Fluoride	2.0
Iron	0.3
Manganese	0.05
pH	6.5-8.5
Silver	0.10
Sulfate	250
Total Dissolved Solids (TDS)	500-1000
Zinc	5

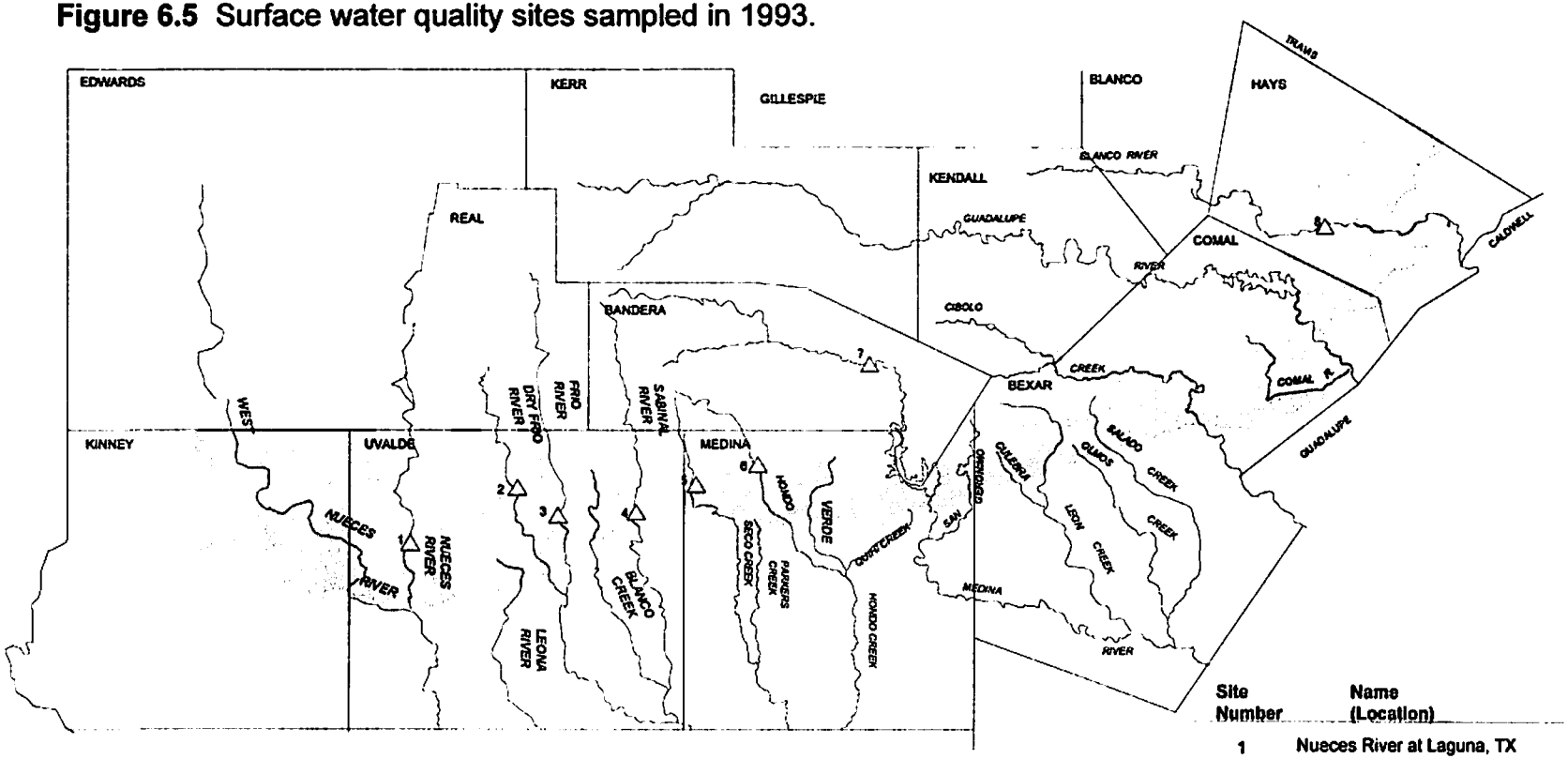
Data Source - EPA, 1993.

The District's water quality monitoring program will continue to monitor for these contaminants as well as many others, to detect and investigate any occurrences of possible contamination to the aquifer. The District continues its programs to protect the water quality of the aquifer through investigating groundwater

contamination, identifying and analyzing anomalous data from the District's aquifer-wide sampling program, diligently monitoring development activities over the recharge zone, and locating and causing abandoned wells to be plugged. All of these programs are intended to ensure that the quality of water in the aquifer will remain at its current excellent condition.

Surface water data is collected at stations upstream of the recharge zone as well as at stations located throughout the aquifer area. Data from the network of gauging stations can be used as a base level to evaluate the quality of water recharging the aquifer and the sensitivity of water quality resulting from land use in various areas of the Edwards aquifer region. Locations of data collection sites are illustrated in **Figure 6.5.** Laboratory analyses of the samples collected in 1993 indicate no evidence of detectable concentrations of pesticides, volatile organic compounds, or other constituents or parameters in excess of typical standards.

Figure 6.5 Surface water quality sites sampled in 1993.



Site Number	Name (Location)
1	Nueces River at Laguna, TX
2	Dry Frio River near Reagan, TX
3	Frio River at Concan, TX
4	Sabinal River near Sabinal, TX
5	Seco Creek at Miller Ranch near Utopia, TX
6	Hondo Creek near Tarpley, TX
7	Medina River at Bandera, Tx
8	Blanco River at Wimberley, TX

7.0 SUMMARY

The average estimated annual groundwater recharge to the Edwards aquifer in the San Antonio area from 1934 through 1993 was 678,900 acre-feet. Recharge in 1993 was 447,600 acre-feet, which was well below the regional average. The lowest annual recharge of 43,700 acre-feet occurred in 1956 and the highest annual recharge of 2,486,000 acre-feet occurred in 1992.

The estimated annual discharge from the Edwards aquifer through wells and springs in 1993 was 996,700 acre-feet, which was the second largest calculated annual discharge for the period of record (1934-1993). The lowest annual discharge through wells and springs for the same time period was 388,800 acre-feet which occurred in 1955.

Water level data for wells during 1993 reflected an above average volume of groundwater in storage in the Edwards aquifer during the year.

In 1993, the District with the cooperation with the USGS collected water quality samples from 60 wells and three springs. These samples were analyzed for 88 constituents and parameters which included common organic constituents, nutrients, dissolved organic carbon, metals and VOCs. Laboratory analyses indicated that two wells contained levels of iron above the secondary MCL and

one well had a concentration of manganese above the secondary MCL. In addition, 11 out of 191 samples contained detectable concentrations of metals. These concentrations were well below the MCLs for those constituents. No detectable concentrations of pesticides were measured in the wells sampled in 1993. VOCs were detected in one well at a level well below the MCLs for the contaminants. VOC concentrations at levels ranging from 0.2 to 0.3 μg/L were encountered in two other wells sampled in 1993, which were below the limits set by current EPA drinking water standards.

Results of the District's 1993 water quality monitoring program illustrate the continued excellent quality of water in the Edwards aquifer.

8.0 DEFINITIONS

Technical terms and abbreviations used in this report are defined as follows:

10 year floating average — The calculated mean of the current year plus the previous nine years in a graph.

Acre-foot — (ac-ft) The quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 ft^3 (cubic feet), about 325,900 gal (gallons), or 1,233 m^3 (cubic meters).

Aquifer — A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield economical quantities of water to wells and springs.

Artesian well — A well deriving its water from a confined aquifer in which the water level stands above the ground surface.

Artesian zone — An area where the water level from a confined aquifer stands above the top of the strata in which the aquifer is located.

Bacteria — Microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped in colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials. (Measured in colonies 100 ml)

Color unit — 1mg/L of platinum in the form of the chloroplatinate ion. Color is express in units of the platinum-cobalt scale.

Conductivity — A measure of the ease with which a conduction current can be caused to flow through a material under the influence of an applied electric field. Generally, in water the higher the total dissolved solids the higher the electrical conductivity.

Confined aquifer — An artesian aquifer or an aquifer bounded above and below by impermeable strata, or by strata with lower permeability than the aquifer itself.

Discharge The volume of water that passes a given point within a given period of time.

Drainage basin A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Freshwater/saline-water interface The interface or area which separates TDS values less than 1000 mg/L (freshwater) from TDS values greater than 1000 mg/L (saline-water). Commonly referred to as the "Bad Water Line".

Gauging station A particular site which systematically collect hydrologic data such as streamflow, springflow or precipitation.

Micrograms per liter (UG/L, µg/L) A unit expressing the concentration chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. 1000 micrograms per liter is equal to 1 milligram per liter.

Milligrams per liter (Mg/L, mg/L) A unit for expressing the concentration of chemical constituents in solution as mass (milligram) of solute per unit volume (liter) of water. 1000 milligrams per liter is equal to 1 gram per liter.

Potentiometric surface An imaginary surface representing the total head of groundwater and defined by the level that water will rise in a well.

Recharge The process involved in absorption and addition of water to the zone of saturation.

Recharge zone The area in which water infiltrates into the ground and eventually reaches the zone of saturation in one or more aquifers.

Specific conductance A measure of the ability of water to conduct an electrical current. Expressed in micro-siemens per centimeter (µS/cm) at 25°C.

Total Dissolved Solids	(TDS) The concentration of dissolved minerals in water.
Transect wells	A group of water quality monitoring wells located at particular site which are used to measure movement of the freshwater/saline-water interface.
Unconfined aquifer	An aquifer, or a portion of an aquifer, having a water table and containing groundwater that is not under pressure beneath relatively impermeable rocks.
Water table	The interface between the zone of saturation and the zone of aeration where the surface pressure of unconfined groundwater is equal to the atmospheric pressure.
Zone of aeration	The subsurface zone where the voids and pore spaces are filled with water under less pressure than that of the atmosphere and air.
Zone of saturation	The subsurface zone in which all voids and pore spaces are filled with water under pressure greater than that of the atmosphere.

9.0 REFERENCES

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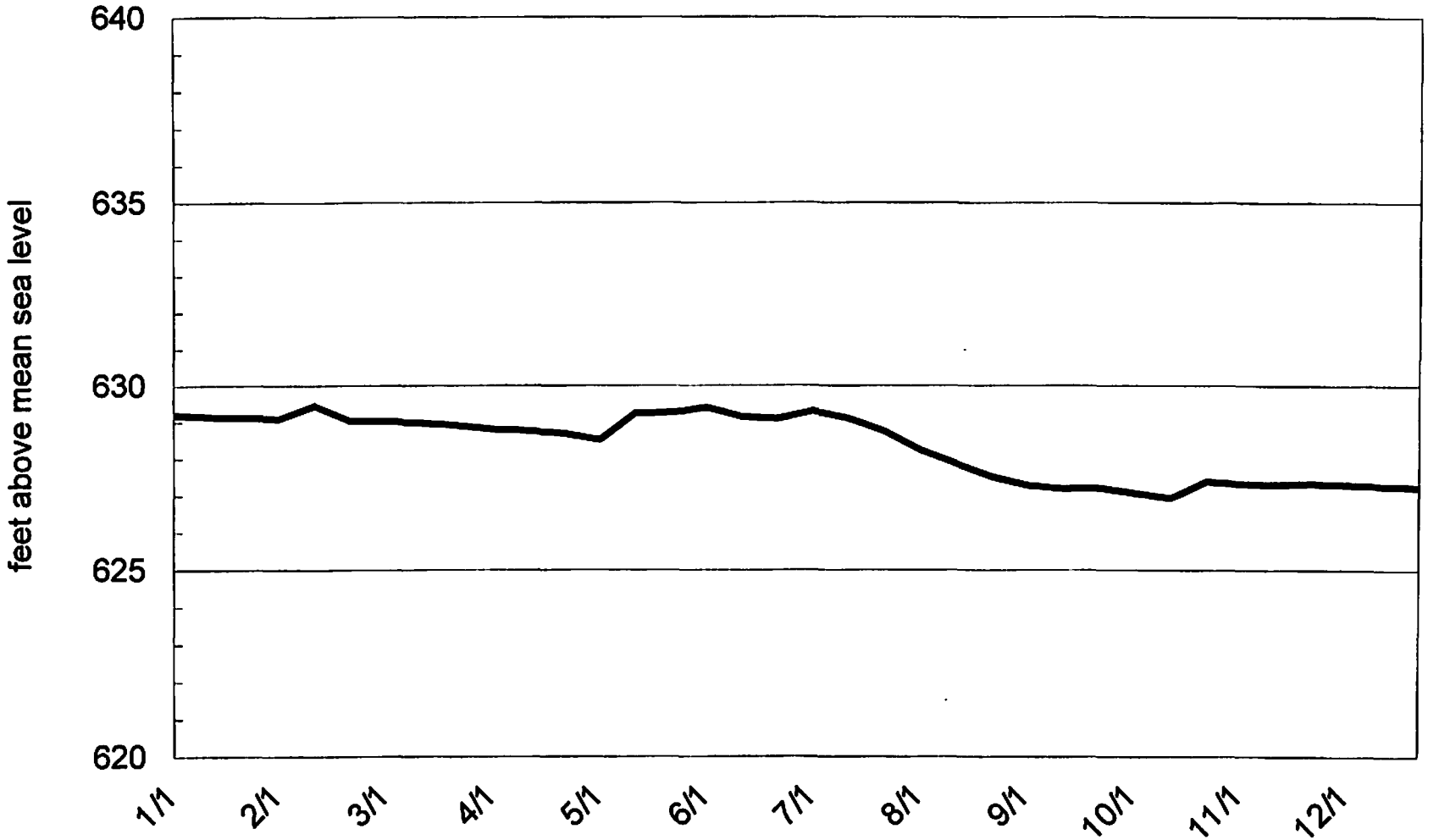
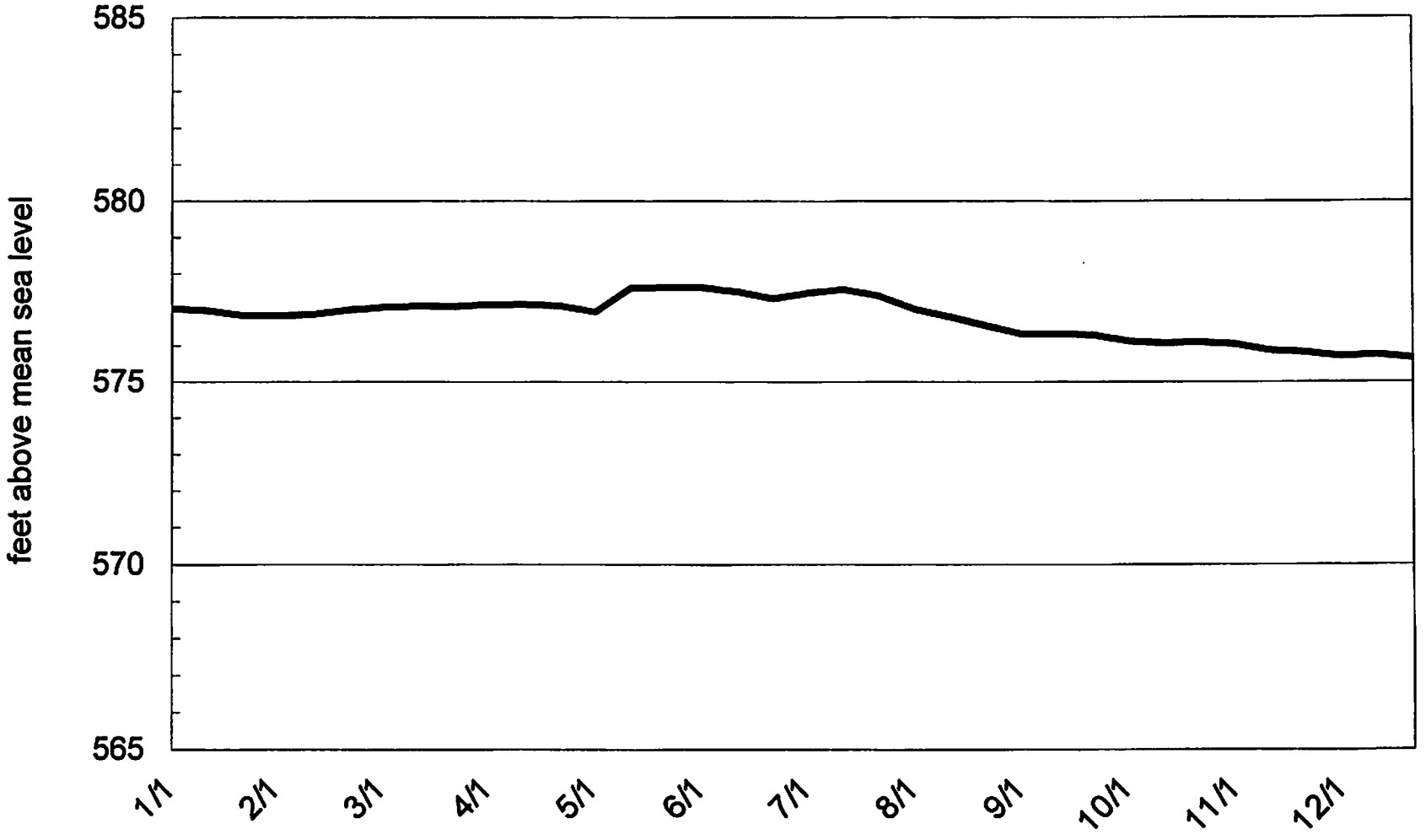
10.0 APPENDIX

Appendix 10.1 - Water Level Data

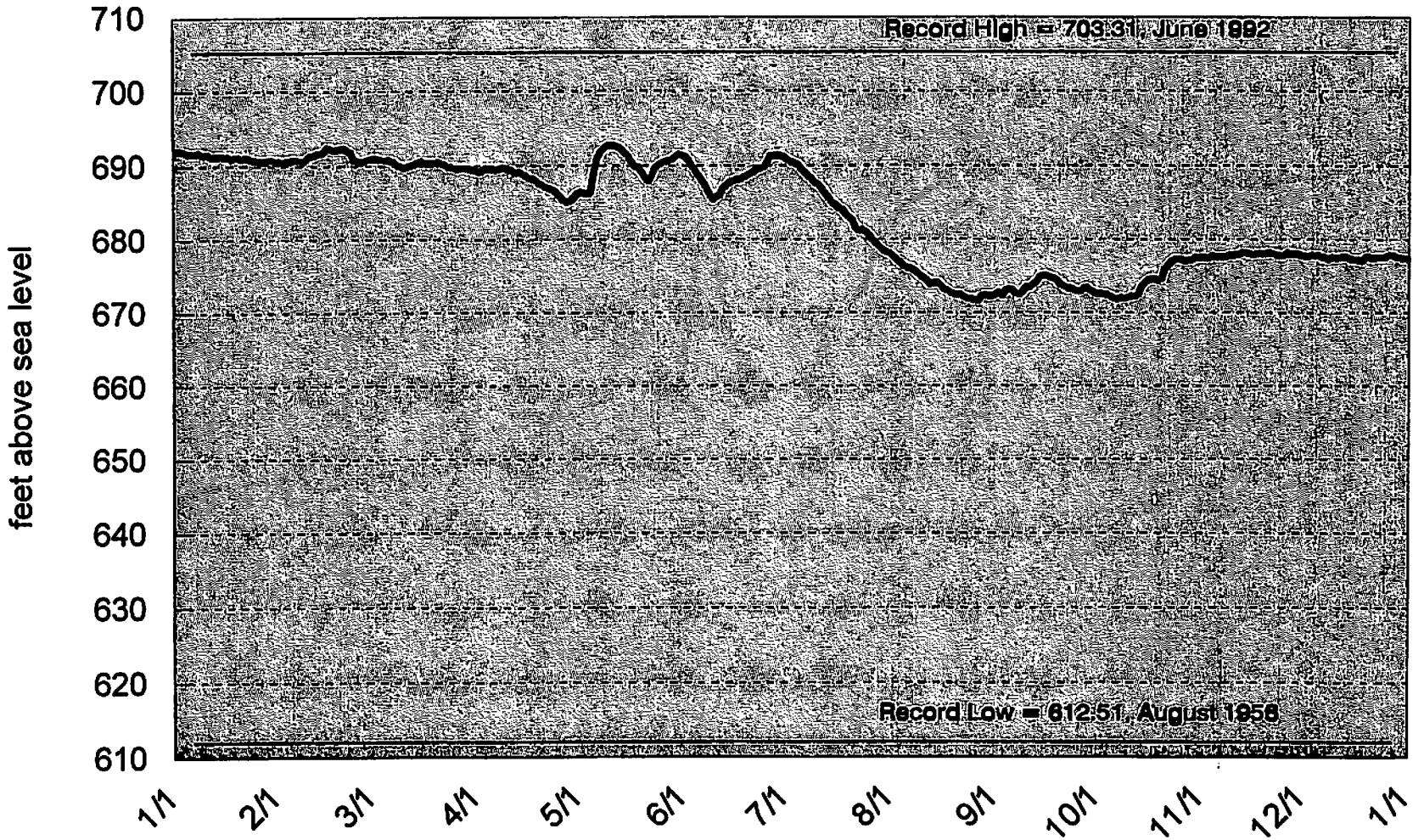
Comal County Index Well
Landa Park
DX 68-23-302
1993



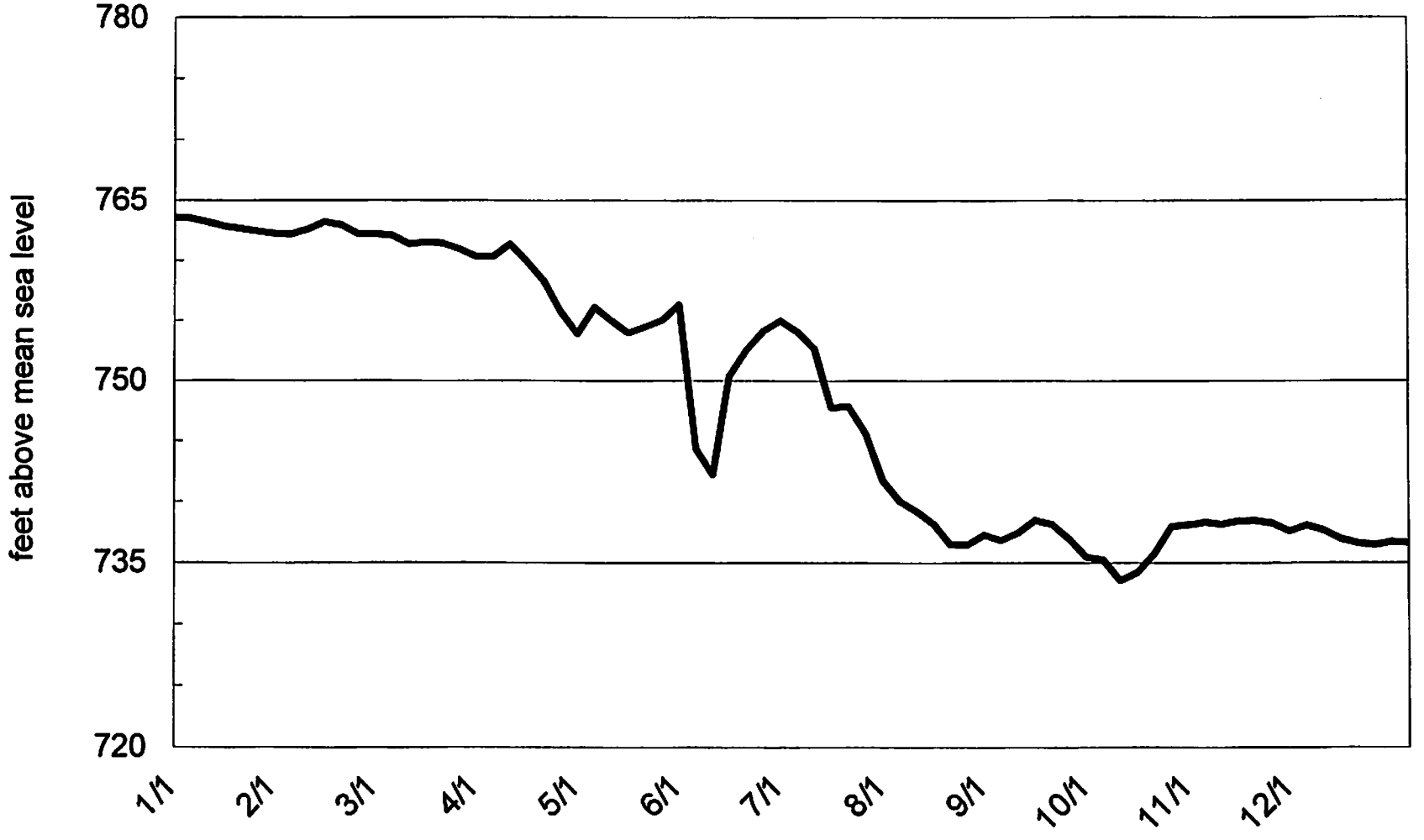
Hays County Index Well
Knispel
LR 67-01-809
1993



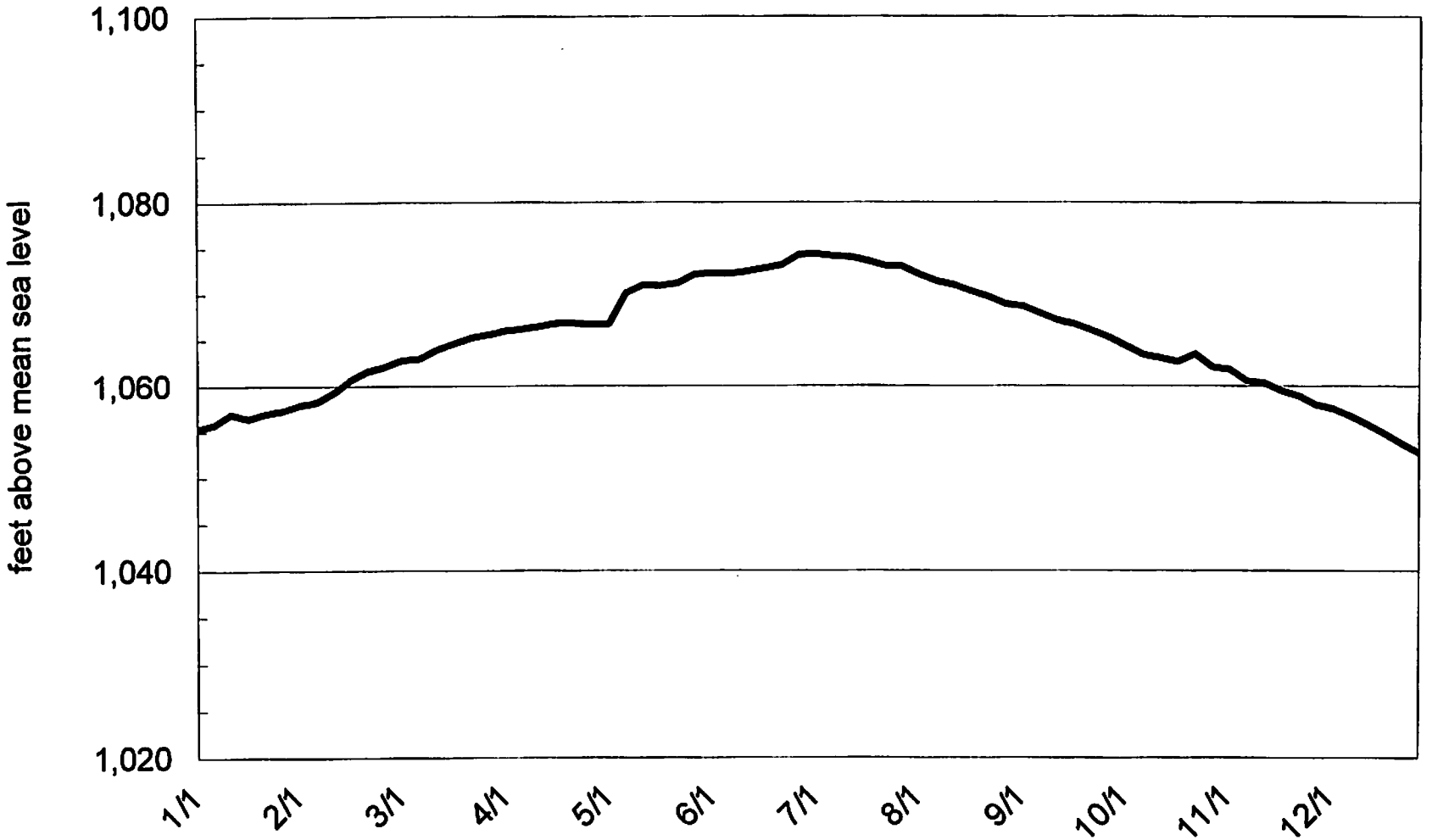
Edwards Aquifer Bexar County Index Well
Dodd Field (J-17), San Antonio
AY 68-37-203
1993



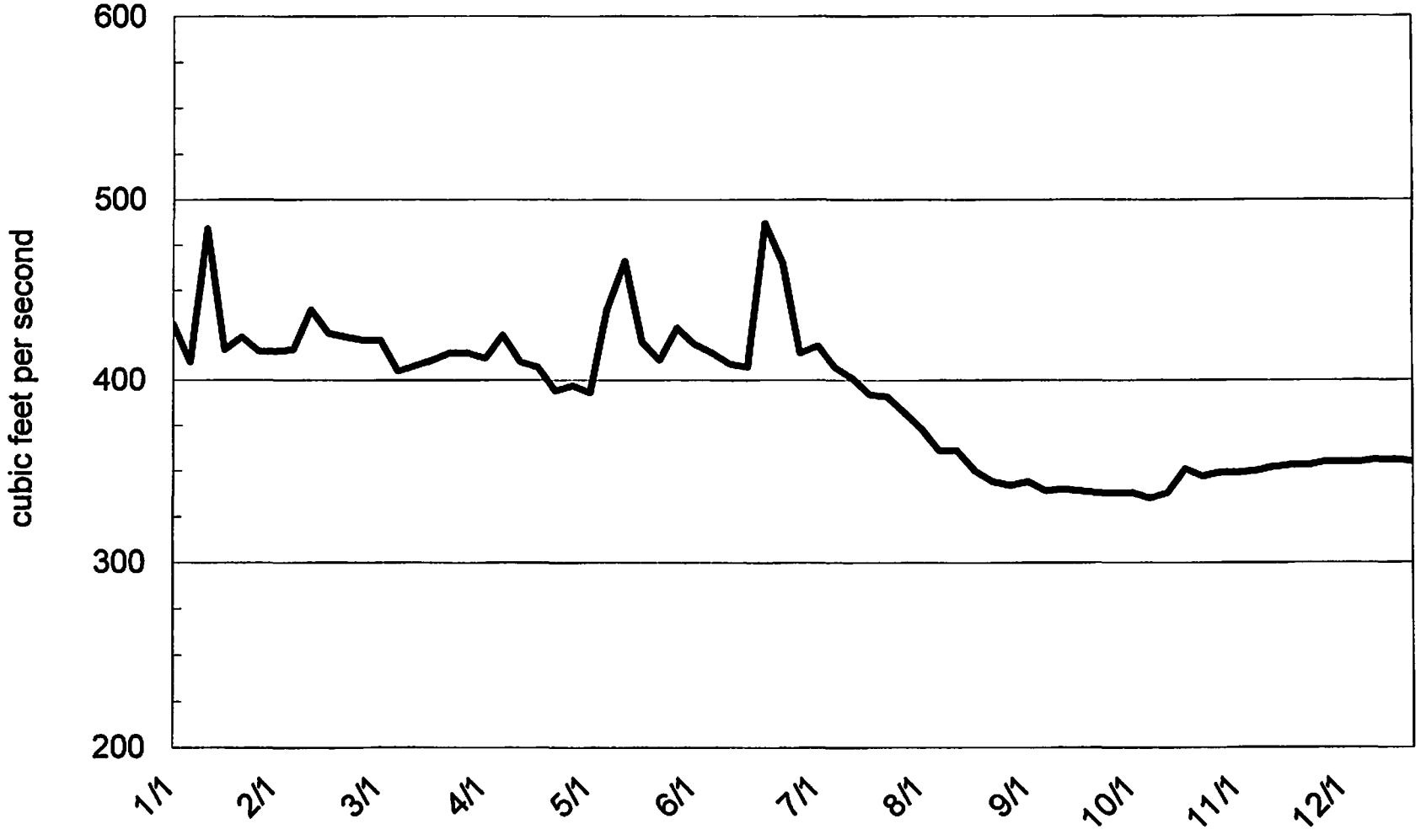
Medina County Index Well
TD 69-47-306
1993



Glen Rose Aquifer Bexar County Index Well
AY 68-19-806
1993



Average Springflow at Comal Springs
1993



EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

YP 69-51-406
Ehler. Water table well in Leona Formation.
Dia. = 14". Depth = 74'. LSD = 874.9'.
Daily high water levels in feet above MSL.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	847.21	845.73	844.88	846.57	843.82	844.50	844.14	843.75	843.50	842.55	843.09	843.44
2		845.55	845.02	846.64	844.02	844.63	844.34	843.77	843.62	843.12	843.36	843.65
3		845.44	845.05	846.71	844.07	844.62	844.47	843.65	843.77	843.40	843.57	843.80
4		845.43	844.96	846.75	843.42	844.02	844.55	843.60	843.95	843.50	843.67	843.76
5		845.25	844.90	846.84	843.32	843.47	844.60	843.55	844.03		843.46	843.67
6		845.12	845.18	846.91	844.16	843.27	844.40	843.53	844.19	843.53	843.35	843.59
7		845.02	845.37	846.80	844.52	843.31	844.41	843.28	844.33	842.76	843.60	843.56
8		845.26	845.50	846.48	844.75	842.79	844.32	843.23	844.40	842.73	843.67	843.51
9		845.38	845.53	846.41	844.92	842.49	844.33	843.29	844.51	843.15	843.82	843.76
10		845.31	845.54	846.44	845.10	842.67	843.76	843.32	844.55	843.10	843.90	843.82
11		845.41	845.53		845.14	842.98	843.45	843.36	844.58	843.10	843.18	843.86
12	847.40	845.28	845.51	846.43	845.07	843.23	843.58	843.35	844.61	843.09	842.88	844.04
13	847.37	845.06	845.73	846.45	844.69	843.47	843.69	843.40	844.67	843.44	842.72	844.08
14	847.27	845.00	845.82	846.38	844.64	843.65	843.65	843.26	844.68	843.25	842.79	843.85
15	847.22	845.14	845.92	846.24	844.25	843.72	843.54	843.24	844.76	843.32	842.95	843.61
16	847.11	845.20	845.99	846.16	844.03	843.36	843.44	843.28	844.75	842.90	843.48	843.71
17	847.08	845.05	846.02	845.92	844.07	843.73	843.34	843.17	844.82	842.47	843.86	843.74
18	846.81	844.99	846.10	845.81	843.67	842.79	843.43	843.09	844.85	842.95	844.06	843.63
19	846.94	844.96	846.16	845.94	843.35	842.59	843.50	842.92	844.82	843.22	844.11	843.69
20	846.95	845.05	846.20	845.90	843.14	843.15	843.25	842.73	844.65	843.34	843.29	843.83
21	846.86	844.99	846.27	845.69	842.97	843.49	843.11	842.62	844.37	843.30	842.93	843.80
22	846.86	844.98	846.30	845.33	842.63	843.64	843.28	842.46	844.08	842.83	842.73	843.85
23	846.65	844.57	846.37	844.85	842.92	843.67	843.29	842.59	843.16	842.82	842.78	
24	846.67	844.63	846.40	844.33	843.32	843.45	843.17	842.75	842.75	842.26	843.17	
25	846.44	844.73	846.37	843.90	843.62	843.25	843.14	842.89	842.76	842.01	843.53	
26	845.92	844.68	846.25	843.51	843.88	843.37	843.21	842.94	843.38	842.55	843.64	
27	845.89	844.63	846.24	843.01	844.08	843.51	843.36	843.08	843.47	842.67	843.26	
28	845.97	844.72	846.21	842.95	844.12	843.70	843.60	843.14	843.67	842.70	843.24	
29	846.07		846.24	843.00	844.02	843.80	843.71	843.23	842.94	842.16	843.47	
30	846.10		846.45	843.57	844.15	843.91	843.72	843.33	842.59	842.33	843.72	
31	845.73		846.51		844.31		843.77	843.39		842.70		

EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

DX 68-30-208
MPRR (Braken). Artesian well in Edwards Limestone.
Dia. = 8". Depth = 292'. LSD = 797.81'.
Daily high water levels in feet above MSL.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	680.20	679.24	679.35	677.89	675.53	679.42	675.67	671.21		664.46	667.25	667.54
2	680.32	679.23	679.42	677.90	675.56	679.39	675.72	670.85		664.37	667.16	667.42
3	680.37	679.18	779.38	677.96	675.49	679.16	675.86	670.49		664.22	667.30	667.50
4	680.38	679.11	679.26	678.01	675.58	678.81	676.03	670.20			667.41	667.39
5	680.21	679.06	679.18	678.02	797.81	678.36	676.34	669.96			667.45	667.46
6	680.13	679.11	679.11	678.02	797.81	678.05	676.61	669.72			667.33	667.31
7	680.14	679.16	679.02	678.05	680.78	677.65	676.89	669.49	665.10		667.46	667.32
8	680.17	679.15	679.43	678.07	680.49	677.18	677.09	669.23	664.91		667.44	667.25
9	680.13	679.12	678.80	678.06	679.92	676.68	677.23	669.09	665.12		667.45	667.28
10	679.99	679.86	678.64	678.06	680.17	676.28	677.20	668.81	665.19		667.44	667.18
11	680.06	680.78	678.64	678.00	680.23	676.07	677.01	668.54	665.39		667.56	667.16
12	680.06	679.81	678.75	677.97	680.28	676.91	676.72	668.25	665.56		667.57	667.31
13	679.88	679.86	678.88	677.82	680.22	676.69	677.51	668.11	665.91		667.67	667.32
14	679.89	679.86	678.98	677.71	680.11	676.75	677.32	667.81	666.00		667.61	667.16
15	679.91	679.95	679.02	677.68	679.85	676.83	677.00	667.72	666.14		667.65	667.14
16	679.82	680.06	678.86	677.55	679.64	676.84	676.47	667.57	666.11		767.65	667.06
17	679.80	679.76	678.89	677.36	679.36	676.91	676.17	667.35	666.00		667.63	667.02
18	679.80	679.70	678.86	677.32	679.14	676.97	675.87	667.04	665.87	665.17	667.66	667.02
19	679.67	679.62	678.76	677.20	678.89	677.04	675.51	666.89	665.73	665.19	667.69	667.24
20	679.71	679.65	678.77	677.12	678.54	677.27	675.13	666.71	665.41	666.89	667.64	667.25
21	679.72	679.68	678.74	676.97	678.21	677.28	674.64	666.47	665.31	667.05	667.68	667.12
22	679.66	679.66	678.63	676.72	678.49	677.03	674.35	666.19	665.17	666.69	667.66	667.17
23	679.67	679.63	678.55	676.53	679.89	676.88	674.02		665.15	666.85	667.63	667.10
24	679.56	679.55	678.43	676.43	679.43	676.81	673.68		664.99	767.11	667.60	667.09
25	679.54	679.41	678.35	676.37	679.12		673.35		664.89	667.07	667.50	667.16
26	679.47	679.32	678.29		679.20		673.07		664.96	667.08	667.66	667.27
27	679.42	679.30	678.26	675.28	679.20		672.74		664.97	666.98	667.65	667.32
28	679.35	679.21	678.26	675.23	679.26	675.20	672.31		664.90	667.06	667.70	667.20
29	679.30		678.23	675.34	679.31	675.24	671.99		664.76	667.16	667.64	667.12
30	679.19		678.07	675.44	679.59	675.48	671.62		664.56	667.05	667.51	667.07
31	679.24		677.98		679.41		671.35			667.16		667.07

EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

TD 69-47-306
CIty of Hondo. Artesian well in Edwards Limestone.
Dia. = 12". Depth = 1600'. LSD = 887.5'.
Daily high water levels in feet above MSL.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	763.59	762.26	762.23	760.35	753.91	756.35	755.01	741.73	737.29	735.46	738.11	738.07
2	763.76	762.36	762.35	760.29	754.47	753.65	754.35	741.82	737.09	735.48	738.25	737.80
3	763.78	762.16	762.43	760.46	754.97	750.08	754.31	741.34	736.81	735.52	738.03	737.40
4	763.78	762.13	762.27	760.47	756.12	746.48	754.14	740.89	737.20	735.75	738.20	737.35
5	763.51	762.19	762.08	760.34	756.12	744.35	754.07	740.03	736.84	735.24	738.29	737.66
6	763.55	762.24	762.15	760.21	755.01	743.03	753.64	740.07	737.46	734.54	738.18	737.77
7	763.63	762.43	762.01	760.66		742.76	752.70	739.56	737.66	734.45	738.35	737.55
8	763.63	762.47	761.86	760.65		740.90	752.61	739.57	738.68	734.10	738.52	736.98
9	763.64	762.44	761.64	760.50		739.91	751.57	869.35	737.53	733.78	738.33	737.12
10	763.21	762.59	761.40	760.51		742.20	750.68	739.19	737.45	733.56	738.14	736.95
11	763.25	762.67	760.92	760.37		743.83	750.13	738.98	737.30	734.30	738.07	736.85
12	763.11	762.70	760.97	760.31		745.49	750.11	738.61	737.85	734.50	738.37	737.41
13	762.81	762.88	760.99	760.15		748.00	749.15	738.70	738.21	734.21	738.42	737.47
14	762.78	763.00	761.19	760.33		748.98	748.66	738.12	738.43	734.62	738.45	736.76
15	762.84	763.22	761.52	759.92		750.44	747.77	738.17	738.47	735.18	738.43	736.58
16	762.86	762.88	761.66	759.48		750.56	747.41	738.52	738.68	735.27	738.21	736.69
17	762.85	762.71	761.53	759.23		751.06	747.28	737.86	738.62	735.27	738.20	736.44
18	762.81	762.64	761.65	759.09		751.55	747.47	737.91	738.36	735.61	738.21	735.96
19	762.68	762.84	761.63	758.75		752.03	747.85	737.08	738.11	735.40	738.37	736.34
20	762.68	762.97	761.45	758.32		752.60	747.87	736.48	738.12	735.75	738.24	736.70
21	762.65	762.97	761.26	758.24	746.94	853.25	747.05	736.09	737.70	736.12	738.27	736.43
22	762.60	762.75	761.39	757.37	747.46	753.73	746.82	736.58	737.37	736.50	738.26	736.65
23	762.74	762.38	761.12	756.66	751.44	754.00	745.90	736.73	737.13	737.20	737.98	736.62
24	762.38	762.20	761.00	756.40	753.55	754.12	745.51	736.81	736.74	737.62	737.99	737.26
25	762.44	762.23	760.95	755.77	755.05	754.15	745.62	736.45	736.94	737.94	737.59	736.60
26	762.31	761.77	760.63	755.18	756.07	754.16	745.40	736.25	736.86	737.99	737.84	736.95
27	762.28	761.66	760.37	754.11	756.54	754.82	744.26	736.57	736.95	737.85	738.20	737.17
28	762.38	761.97	760.29	751.26	756.56	754.93	743.89	736.60	736.95	738.04	738.41	737.11
29	762.34		760.36		756.72	754.98	743.20	736.85	736.22	737.82	738.52	736.50
30	762.07		760.37		757.10	755.03	741.57	737.04	735.90	737.64	738.49	736.13
31	762.18		760.39		757.27		741.84	737.06		737.76		736.28

EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

YP 69-50-302
City of Uvalde. Artesian well in Edwards Limestone.
Dia. = 10". Depth = 350'. LSD = 904.9'.
Daily high water levels in feet above MSL.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	884.74	884.63	884.03	883.99	882.71	881.63	880.75		878.88	878.75	878.18	877.69
2	884.77	884.56	884.08	883.97	882.67	881.64	880.67		878.84	878.70	878.16	877.70
3	884.80	884.56	884.08	884.04	882.65	881.52	880.55	879.19	878.86	878.76	878.14	877.69
4	884.79	884.51	883.96	884.00	882.55	881.39	880.49	879.15	878.96	878.81	878.16	877.65
5	884.75	884.52	883.91	884.00	882.56	881.25	880.48	879.15	879.00	878.82	878.14	877.65
6	884.78	884.51	883.89	884.03	882.60	881.15	880.30	879.11	879.01	878.81	878.10	877.61
7	884.81	884.55	883.80	884.02	882.63	881.03	880.30	879.11	879.00	878.80	878.07	877.60
8	884.82	884.55	883.83	884.04	882.70	880.90	880.23	879.15	879.05	878.81	878.07	877.60
9	884.80	884.51	883.81	884.01	882.71	880.77	880.15	879.15	879.04	878.78	878.05	877.60
10	884.72	884.48	883.82	884.03	882.66	880.67	880.15	879.05	878.96	878.74	878.03	877.56
11	884.77	884.44	883.78	883.98	882.70	880.76	880.12	879.03	878.95	878.73	878.05	877.51
12	884.85	884.37	883.83	884.00	882.67	880.80	880.12	879.01	879.00	878.71	878.05	877.53
13	884.79	884.36	883.88	883.97	882.61	880.86	879.96	879.00	879.08	878.65	878.05	877.53
14	884.84	884.35	883.93	884.05	882.54	880.85	879.88	878.98	879.06	878.60	878.03	877.49
15	884.86	884.39	883.98	883.96	882.46	880.90		878.96	879.15	878.57	878.00	877.48
16	884.85	884.24	884.02	883.85	882.34	880.92		879.02	879.19	878.58	877.99	877.47
17	884.81	884.20	883.90	883.86	882.22	880.94		878.95	879.16	878.52	877.96	877.45
18	884.82	884.20	883.93	883.81	882.09	880.96		878.93	879.16	878.48	877.95	877.44
19	884.85	884.26	883.95	883.81	882.01	880.99		878.92	879.15	878.43	877.95	877.43
20	884.85	884.25	883.95	883.72	881.94	881.02	879.66	878.89	879.07	878.44	877.89	877.43
21	884.84	884.26	883.96	883.64	881.81	881.07	879.60	878.90	879.00	878.42	877.88	877.39
22	884.81	884.20	883.99	883.54	881.67	881.10	879.58	878.89	878.95	878.38	877.85	877.39
23	884.87	884.08	883.89	883.47	881.75	881.08	879.50	878.86	878.92	878.37	877.83	877.36
24	884.75	884.10	883.98	883.40	881.72	881.06	879.51	878.81	878.90	878.34	877.80	877.35
25	884.80	884.11	883.97	883.18	881.70	881.05	879.46	878.77	878.90	878.31	877.78	877.34
26	884.77	884.02	883.94	883.00	881.70	881.01	879.45	878.77	878.90	878.25	877.75	877.36
27	884.77	884.01	883.90	882.83	881.71	880.98	879.32	878.74	878.89	878.24	877.74	877.38
28	884.78	884.01	883.96	882.75	881.67	880.95		878.89	878.91	878.24	877.73	877.33
29	884.73		883.94	882.66	881.59	880.88		878.96	878.84	878.24	877.72	877.30
30	884.64		883.97	882.72	881.58	880.82		878.92	878.80	878.20	877.71	877.29
31	884.63		884.00		881.64			878.90		878.20		877.29

EDWARDS UNDERGROUND WATER DISTRICT

Water Levels in Observation Wells

AY 68-19-806

La Escondida. Water-table well in Lower Glen Rose Limestone.

Dia. = 8". Depth = 710'. LSD = 1230'.

Daily High Water Levels in feet above MSL.

Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1055.31	1057.95	1062.83	1066.06	1066.75	1072.20	1074.31	1073.05	1068.91	1065.32	1062.02	1057.94
2	1055.40	1058.02	1063.03	1066.01	1066.76	1072.33	1074.38	1072.72	1068.98	1065.00	1061.76	1057.76
3	1055.77	1058.12	1062.90	1066.17	1066.65	1072.49	1074.44	1072.78	1068.80	1064.61	1061.54	1057.76
4	1055.88	1058.05	1062.90	1066.17	1066.72	1072.45	1074.45	1072.62	1068.72	1064.55	1061.79	1057.65
5	1055.81	1058.23	1062.97	1066.22	1067.51	1072.28	1074.40	1072.18	1068.71	1064.33	1061.79	1057.51
6	1055.74	1058.23	1063.32	1066.31	1068.55	1072.20	1074.40	1072.09	1068.54	1064.10	1061.40	1057.27
7	1056.13	1058.54	1063.46	1066.52	1069.40	1072.26	1074.80	1071.87	1068.20	1064.06	1061.01	1057.06
8	1056.12	1058.58	1063.56	1066.44	1069.94	1072.31	1074.26	1071.67	1068.17	1064.02	1060.92	1056.99
9	1056.61	1058.80	1063.87	1066.47	1070.09	1072.30	1074.26	1071.51	1068.05	1063.85	1060.76	1056.87
10	1056.95	1059.27	1063.99	1066.54	1070.16	1072.23	1074.15	1071.42	1067.95	1063.38	1060.51	1056.72
11	1056.26	1059.55	1064.24	1066.52	1070.56	1072.22	1074.24	1071.38	1067.74	1063.40	1060.72	1056.29
12	1056.15	1059.78	1064.28	1066.70	1070.69	1072.25	1074.25	1071.22	1067.76	1063.41	1060.69	1056.51
13	1055.94	1060.03	1064.16	1066.98	1070.90	1072.35	1074.24	1071.10	1067.73	1063.24	1060.70	1056.45
14	1056.39	1060.47	1064.29	1067.12	1070.97	1072.40	1074.14	1071.11	1067.68	1063.15	1060.58	1055.95
15	1056.45	1060.66	1064.64	1066.85	1071.01	1072.50	1074.07	1071.03	1067.16	1063.05	1060.31	1055.81
16	1056.48	1060.61	1064.76	1066.71	1071.04	1072.56	1074.00	1070.90	1067.19	1063.00	1060.16	1055.62
17	1056.55	1060.59	1064.65	1066.72	1071.23	1072.70	1073.88	1070.78	1067.11	1062.89	1059.78	1055.32
18	1056.50	1060.80	1064.92	1066.84	1071.29	1072.65	1073.85	1070.65	1067.10	1062.69	1059.85	1054.97
19	1056.75	1061.24	1065.24	1066.84	1070.95	1072.75	1073.68	1070.45	1067.05	1062.56	1059.86	1054.83
20	1057.01	1061.64	1065.29	1066.85	1070.95	1072.86	1073.65	1070.33	1066.74	1062.63	1059.45	1054.80
21	1057.14	1061.75	1065.35	1066.42	1070.87	1072.95	1073.57	1070.26	1066.46	1063.85	1059.24	1054.56
22	1057.47	1061.76	1065.09	1066.68	1071.19	1073.12	1073.42	1070.08	1066.27	1064.05	1059.06	1054.61
23	1057.46	1061.76	1065.30	1066.80	1071.51	1073.18	1073.36	1069.94	1066.20	1063.76	1059.32	1054.19
24	1057.28	1062.01	1065.50	1066.82	1071.54	1073.08	1073.32	1069.95	1066.04	1063.60	1059.01	1053.93
25	1057.32	1062.11	1065.60	1066.73	1071.20	1073.21	1073.13	1069.71	1066.05	1063.47	1058.89	1053.72
26	1057.37	1061.91	1065.62	1066.32	1071.58	1073.52	1073.03	1069.58	1065.84	1063.30	1058.74	
27	1057.55	1061.93	1065.75	1066.35	1071.85	1073.84	1072.80	1069.53	1065.55	1062.80	1058.40	
28	1057.65	1062.19	1065.85	1066.40	1071.93	1074.03	1072.60	1069.43	1065.48	1062.84	1058.27	1053.16
29	1057.41		1066.14	1066.47	1072.02	1074.10	1073.04	1069.31	1065.28	1062.90	1057.97	1052.87
30	1057.48		1066.14	1066.63	1072.14	1074.30	1073.03	1069.20	1065.19	1062.28	1057.92	1052.66
31	1057.74		1066.08		1072.18		1073.02	1069.11		1062.01		1052.71

EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

DX 68-23-302
Landa Park. Water-table well in Edwards Limestone.
Dia. = 8". Depth = 230'. LSD = 642.7'.
Daily High Water Levels in feet above MSL.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1		629.09	629.03	628.81	628.51	629.40	629.30	628.23	627.28	627.06	627.31	627.30
2		629.09	629.03	628.78	628.51	629.39	629.30	628.22	627.28	627.05	627.31	627.29
3		629.08	629.07	628.75	628.51	629.37	629.29	628.14	627.28	627.02	627.30	627.29
4	629.22	629.06	629.07	628.78	628.50	629.35	629.29	628.08	627.28	627.01	627.30	627.29
5	629.18	629.04	629.04	628.77	640.89	629.31	629.29	628.06	627.30	627.01	627.30	627.30
6	629.17	629.05	628.97	628.77	628.98	629.29	629.28	628.03	627.30	626.98	627.30	627.30
7	629.17	629.05	628.99	628.77	629.11	629.28	629.21	627.99	627.27	626.94	627.32	627.29
8	629.17	629.06	628.99	628.77	629.16	629.24	629.15	627.94	627.25	626.94	627.32	627.28
9	629.16	629.06	628.99	628.76	629.23	629.20	629.13	627.89	627.18	626.94	627.32	627.27
10	629.15	629.45	628.99	628.76	629.24	629.14	629.10	627.87	627.19	626.93	627.31	627.26
11	629.15	629.14	628.98	628.77	629.30	629.10	629.06	627.82	627.19	626.94	627.31	627.24
12	629.19	629.12	628.95	628.77	629.33	629.07	629.05	627.78	627.22	626.93	627.33	627.26
13	629.16	629.12	629.04	628.76	629.35	629.07	629.02	627.74	627.25	626.89	627.33	627.26
14	629.15	629.14	642.70	628.80	629.36	629.09	628.98	627.69	627.26	626.93	627.33	627.26
15	629.16	629.17	642.70	628.76	629.36	629.09	628.93	627.67	627.26	626.96	627.34	627.24
16	629.15	629.08	628.96	628.73	629.33	629.09	628.86	627.65	627.27	626.99	627.34	627.23
17	629.16	629.06	628.96	628.70	629.33	629.09	628.85	627.61	627.27	627.02	627.33	627.22
18	629.16	629.00	628.94	628.70	629.33	629.09	628.79	627.57	627.26	627.04	627.32	627.20
19	629.14	629.02	628.92	628.71	629.27	629.09	628.78	627.54	627.24	627.01	627.33	627.22
20	629.13	629.03	628.80	628.69	629.30	629.11	628.74	627.51	627.21	627.39	627.33	627.23
21	629.13	629.01	628.91	628.67	629.28	629.15	628.71	627.50	627.18	627.16	627.33	627.23
22	629.12	629.02	628.91	628.64	629.21	629.15	628.70	627.43	627.17	627.14	627.34	627.20
23	629.11	629.03	628.92	628.61	629.56	629.16	628.62	627.40	627.17	627.17	627.34	627.19
24	629.11	629.06	628.92	628.61	629.33	629.15	628.58	627.37	627.16	627.22	627.33	627.19
25	629.10	629.07	628.88	628.60	629.30	629.13	628.53	627.36	627.14	627.23	627.32	627.20
26	629.10	629.04	628.87	628.59	629.30	629.20	628.52	627.34	627.13	627.23	627.33	627.21
27	629.10	629.02	628.87	628.53	629.30	629.26	628.46	627.32	627.15	627.23	627.34	627.21
28	629.10		628.84	628.50	629.57	629.28	628.42	627.31	627.15	627.23	627.34	627.21
29	629.09		628.84	628.53	629.37	629.29	628.38	627.31	627.13	627.24	627.34	627.21
30	629.07		628.86	628.51	629.35	629.29	628.31	627.31	627.09	627.24	627.32	627.20
31			628.86		629.40		628.27	627.30		627.25		627.20

EDWARDS UNDERGROUND WATER DISTRICT

Water Levels in Observation Wells

LR 67-01-809

Enispel. Water table well in Edwards Limestone.

Dia. = 4'. Depth = 32.5'. LSD = 601.7'.

Daily High Water Levels In feet above MSL.

Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	577.03	576.83	577.06	577.14	576.93	577.61	577.47	577.01	576.32	576.13	576.04	575.71
2	577.04	576.82	577.07	577.14	576.92	577.61	577.52	577.00	576.31	576.11	575.97	575.71
3	577.05	576.82	577.08	577.13	576.91	577.60	577.54	576.98	576.30	576.10	575.96	575.71
4	577.04	576.82	577.08	577.13	576.91	577.60	577.55	576.95	576.27	576.08	575.96	575.70
5	577.01	576.82	577.08	577.15	577.19	577.57	577.57	576.92	576.32	576.08	575.91	575.70
6	577.03	576.83	577.09	577.15	577.37	577.54	577.63	576.89	576.33	576.12	575.89	575.70
7	577.05	576.85	577.11	577.20	577.44	577.52	577.62	576.86	576.32	576.11	575.89	575.69
8	577.05	576.85	577.08	577.20	577.47	577.51	577.60	576.83	576.35	576.10	575.89	576.65
9	577.04	576.84	577.09	577.19	577.53	577.51	577.59	352.70	576.34	576.10	575.88	575.76
10	576.98	576.87	577.10	577.15	577.60	577.50	577.56	576.78	576.33	576.08	575.87	575.75
11	576.96	576.89	577.09	577.16	577.62	577.48	577.55	576.76	576.30	576.08	575.86	575.73
12	576.95	576.89	577.09	577.18	577.65	577.45	577.55	576.74	576.31	576.07	575.86	575.73
13	576.93	576.91	577.09	577.18	577.65	577.45	577.54	576.71	576.31	576.07	575.85	575.72
14	576.92	576.92	577.07	577.16	577.65	577.41	577.50	576.69	576.31	576.05	575.83	575.70
15	576.91	576.96	577.08	577.19	577.65	577.40	577.48	576.67	576.32	576.05	575.81	575.70
16	576.89	576.97	577.10	577.14	577.65	577.38	577.46	576.65	576.31	576.05	575.82	575.69
17	576.86	576.94	577.11	577.12	577.65	577.38	577.45	576.63	576.30	576.05	575.83	575.68
18	576.85	576.95	577.10	577.11	577.65	577.35	577.41	576.61	576.30	576.05	575.84	575.66
19	576.81	576.96	577.08	577.10	577.63	577.33	577.39	576.56	576.30	576.03	575.84	575.65
20	576.83	576.99	577.09	577.11	577.61	577.31	577.38	576.55	576.30	576.10	575.82	575.65
21	576.84	577.00	577.09	577.11	577.60	577.30	577.33	576.54	576.26	576.11	575.81	575.62
22	576.84	577.01	577.08	577.10	577.62	577.30	577.32	576.54	576.25	576.11	575.80	575.63
23	576.85	577.00	577.08	577.06	577.64	577.30	577.31	576.48	576.23	576.11	575.80	575.61
24	576.83	576.98	577.08	577.06	577.63	577.32	577.29	576.45	576.21	576.10	575.80	575.61
25	576.82	576.97	577.07	577.06	577.62	577.33	577.25	576.45	576.19	576.10	575.78	575.60
26	576.82	576.97	577.09	577.04	577.63	577.34	577.23	576.41	576.20	576.10	575.77	575.60
27	576.82	576.97	577.10	577.02	577.62	577.34	577.19	576.41	576.19	576.08	575.76	575.60
28	576.83	576.95	577.10	576.92	577.63	577.34	577.14	576.40	576.16	576.07	575.75	575.59
29	576.82		577.10	576.92	577.61	577.34	577.09	576.35	576.15	576.09	575.74	575.57
30	576.81		577.12	576.94	577.62	577.39	577.05	576.35	576.14	576.06	575.71	575.56
31	576.84		577.13		577.63		577.03	576.34		576.04		575.55

EDWARDS UNDERGROUND WATER DISTRICT
Water Levels in Observation Wells

AY 68-37-203
J-17 U.S. Government (Ft. Sam Houston). Artesian well in Edwards Limestone.
Dia. = 8" - 6". Depth = 874'. LSD = 730.81'.
Records Available: 1932-
Daily high water levels in feet ablve mean sea level.
Calendar Year 1993.

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	691.8	690.6	690.9	689.4	686.2	691.4	691.1	678.2	672.5	672.6	677.6	677.8
2	692.1	690.6	690.9	689.2	686.4	691.2	690.8	*****	672.7	672.6	677.5	677.7
3	692.1	690.5	690.9	689.3	686.3	690.6	690.5	677.2	672.4	672.4	677.5	677.9
4	692.0	690.6	690.9	689.7	686.2	689.9	690.4	676.8	673.1	672.4	677.8	677.8
5	691.8	690.6	690.8	689.6	686.3	689.1	690.1	676.4	673.2	672.2	677.7	677.9
6	691.7	690.8	690.8	689.5	689.1	688.6	689.6	676.1	673.1	671.9	677.6	677.7
7	691.7	690.8	690.7	689.4	691.0	687.9	689.1	676.0	672.7	671.9	677.6	677.6
8	691.7	690.7	690.5	689.6	691.9	687.1	688.6	675.8	672.5	672.1	677.6	677.4
9	691.8	690.5	690.1	689.7	692.3	686.2	688.3	675.5	672.9	672.0	677.9	677.6
10	691.5	690.9	690.0	689.6	692.7	685.4	687.7	675.0	673.4	672.1	677.8	677.5
11	691.6	691.4	689.7	689.7	692.7	685.8	687.5	674.7	673.5	672.3	678.0	677.5
12	691.6	691.5	689.9	689.4	692.7	686.0	686.9	674.4	673.8	672.2	678.0	677.6
13	691.2	691.7	690.1	689.0	692.6	687.0	686.3	673.9	674.2	672.5	678.2	677.7
14	691.3	691.7	690.2	689.1	692.2	687.3	685.7	674.1	674.9	673.6	678.2	677.4
15	691.3	691.9	690.4	688.9	691.8	687.7	685.0	674.2	675.1	674.1	678.1	677.4
16	691.3	691.5	690.7	688.6	691.3	687.9	684.7	673.7	675.1	674.5	677.9	677.2
17	691.2	691.4	690.4	688.4	690.6	688.1	684.3	673.2	675.1	674.6	678.1	677.2
18	691.2	691.2	690.3	688.2	689.9	688.1	684.0	673.0	674.8	674.6	678.1	677.3
19	691.0	691.3	690.4	688.0	689.8	688.4	683.4	672.7	674.5	674.4	678.1	677.7
20	691.2	691.3	690.4	687.5	688.2	688.6	682.9	672.5	673.9	674.7	678.1	677.6
21	691.2	691.4	690.5	687.3	688.5	688.9	682.6	672.5	673.7	676.0	678.2	677.4
22	691.0	691.1	690.3	687.1	687.9	689.3	681.5	672.5	673.3	676.6	678.1	677.5
23	691.2	690.9	690.1	686.9	688.6	689.5	681.2	672.1	673.4	677.0	677.9	677.5
24	691.1	690.8	689.9	686.7	689.7	689.6	681.3	671.9	673.1	677.3	677.9	677.5
25	690.8	690.7	689.8	686.4	690.1	689.8	681.0	671.9	673.0	677.3	677.9	677.7
26	690.7	690.5	689.6	685.9	690.4	690.4	680.5	671.7	672.9	677.3	678.2	677.9
27	690.6	690.6	689.6	685.3	690.6	691.3	679.5	671.7	673.3	677.1	678.1	677.9
28	690.7	690.8	689.7	685.1	690.6	691.4	679.5	672.3	673.4	677.2	678.1	677.6
29	690.8		689.8	685.2	690.9	691.4	678.9	672.4	673.0	677.2	678.0	677.5
30	690.8		689.6	685.7	691.2	691.3	678.6	672.3	672.8	677.5	677.9	677.5
31	690.7		689.5		691.5		678.3	672.3		677.5		677.4

Appendix 10.2 - Water Quality Data

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
AY 68-37-705	09/28/93	11:00		1440	5000	28	490	7.4	200	240	70	17
AY 68-37-521	01/27/93	13:50	1489	50	30	30	5310	6.8	250	2200	560	200
AY 68-37-521	02/19/93	12:10	1489	60	30	26	5310	6.7	240	2200	560	190
AY 68-37-521	02/19/93	12:15	1489	60	30	26	5290	6.7	240	2100	520	190
AY 68-37-521	04/01/93	11:00	1489	60	30	31.5	5190	6.8	230	1900	460	190
AY 68-37-521	04/26/93	14:00	1489	60	30	32	5290	6.5	250	2200	550	190
AY 68-37-521	05/04/93	14:10	1489	62	30	31.5	5240	6.7	250	2100	530	190
AY 68-37-521	06/30/93	10:30	1489	60	30	30	5120	6.8	210	2100	530	190
AY 68-37-521	07/28/93	14:00	1489	60	30	34	3800	6.8	230	530	110	63
AY 68-37-521	09/08/93	13:23	1489	64	30	32	5200	6.7	240	2300	590	200
AY 68-37-521	09/27/93	14:07	1489	56	30	31.5	1530	6.4	240	2300	590	200
AY 68-37-521	11/30/93	11:25	1489	70	14	29.5	5000	6.8	230	2150	580	210
AY 68-37-521	12/29/93	10:55	1489	60	14	29	5670	6.8	230	2130	550	190
AY 68-37-522	01/27/93	12:00	1075	60	25	30	4150	6.9	230	1600	410	140
AY 68-37-522	02/19/93	12:50	1075	60	25	26	4150	6.9	230	1600	410	140
AY 68-37-522	02/19/93	12:55	1075	60	25	26	4150	6.8	230	1600	390	150
AY 68-37-522	04/01/93	12:30	1075	60	25	31	4250	6.9	210	1600	400	150
AY 68-37-522	04/26/93	14:10	1075	60	25	32	4100	6.6	220	1700	450	140
AY 68-37-522	05/04/93	14:55	1075	100	25	30.5	4120	6.7	220	1600	410	150
AY 68-37-522	06/30/93	10:50	1075	60	25	30.5	3950	6.9	200	1600	410	140
AY 68-37-522	07/28/93	14:20	1075	60	25	33	4220	6.8	210	1700	440	150
AY 68-37-522	09/08/93	14:24	1075	84	25	31.5	3900	6.7	220	1700	450	150
AY 68-37-522	09/27/93	15:04	1075	74	25	31.5	4200	6.4	220			
AY 68-37-522	11/30/93	11:24	1075	69	12	29	3800	6.9	220	1620	440	160
AY 68-37-522	12/29/93	10:45	1075	60	12	28	4430	6.9	210	1600	410	140
AY 68-37-523	01/27/93	12:05	1175	65	30	30.5	5550	6.8	240	2200	550	210
AY 68-37-523	02/19/93	13:20	1175	60	30	26	5550	6.8	240	2100	530	200
AY 68-37-523	02/19/93	13:25	1175	60	30	26.5	5550	6.8	240	2200	520	210
AY 68-37-523	04/01/93	13:15	1175	60	30	31	5580	6.8	250	2200	530	220
AY 68-37-523	04/26/93	14:30	1175	60	30	31	5490	6.5	240	2300	580	200
AY 68-37-523	05/04/93	14:40	1175	95	30	31	5480	6.6	250	730	180	67
AY 68-37-523	06/30/93	11:15	1175	60	30	30	5290	6.8	230	2300	530	230
AY 68-37-523	07/28/93	14:30	1175	60	30	32.5	5470	6.8	240	2300	570	220
AY 68-37-523	09/08/93	13:47	1175	84	30	31.5	5300	6.6	240	2400	590	220
AY 68-37-523	09/27/93	14:36	1175	83	30	31	5600	6.4	240			

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
AY 68-37-705	09/28/93	11	1.3	24	29	0.3	12	289			
AY 68-37-521	01/27/93	450	27	900	1800	2.2	20	4110			
AY 68-37-521	02/19/93	460	27	890	1800	2.3	20	4090			
AY 68-37-521	02/19/93	440	26	860	1800	2.3	20	4000			
AY 68-37-521	04/01/93	470	29	870	1500	2.4	19	3680			
AY 68-37-521	04/26/93	450	27	850	1200	2	19	3440			
AY 68-37-521	05/04/93	450	28	870	1800	2.9	18	4040			
AY 68-37-521	06/30/93	460	27	540	1800	2.3	18	3690			
AY 68-37-521	07/28/93	460	28	910	1700	3	19	3430			
AY 68-37-521	09/08/93	460	26	790	1800	2.9	19	4030			
AY 68-37-521	09/27/93	470	30	820	1700	2.6	19	3970			
AY 68-37-521	11/30/93	630	37	1050	1800	5.2	8.8	4050			
AY 68-37-521	12/29/93	590	49	920	1800	4.5	9.3	4250			
AY 68-37-522	01/27/93	350	22	680	1300	2.1	18	3060			
AY 68-37-522	02/19/93	350	23	560	1300	2.1	18	2940			
AY 68-37-522	02/19/93	350	21	650	1300	2.1	17	3020			
AY 68-37-522	04/01/93	350	23	640	1200	2.3	17	2910			
AY 68-37-522	04/26/93	340	21	640	1300	2.5	17	3040			
AY 68-37-522	05/04/93	340	22	670	1300	2.5	17	3050			
AY 68-37-522	06/30/93	340	22	390	1300	2.4	17	2740			
AY 68-37-522	07/28/93	340	22	570	1300	2.5	17	2970			
AY 68-37-522	09/08/93	350	3.4	640	1300	2.7	17	3040			
AY 68-37-522	09/27/93										
AY 68-37-522	11/30/93	560	26	850	1200	2.7	7.7	3090			
AY 68-37-522	12/29/93	390	42	690	1100	2.7	8.1	3100			
AY 68-37-523	01/27/93	480	29	980	1800	2.5	19	4220			
AY 68-37-523	02/19/93	490	28	920	1800	2.3	19	4130			
AY 68-37-523	02/19/93	490	28	950	1800	2.5	19	4160			
AY 68-37-523	04/01/93	490	29	900	1700	2.7	18	4040			
AY 68-37-523	04/26/93	490	28	930	1600	2.6	18	3990			
AY 68-37-523	05/04/93	480	30	930	1800	2.9	17	3660			
AY 68-37-523	06/30/93	500	28	700	1800	2.3	18	3940			
AY 68-37-523	07/28/93	490	26	910	2000	2.9	18	4380			
AY 68-37-523	09/08/93	490	27	900	1800	3	18	4190			
AY 68-37-523	09/27/93										

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
AY 68-37-705	09/28/93	1.3	
AY 68-37-521	01/27/93		
AY 68-37-521	02/19/93		
AY 68-37-521	02/19/93		
AY 68-37-521	04/01/93		
AY 68-37-521	04/26/93		
AY 68-37-521	05/04/93		
AY 68-37-521	06/30/93		
AY 68-37-521	07/28/93		
AY 68-37-521	09/08/93		
AY 68-37-521	09/27/93		
AY 68-37-521	11/30/93		
AY 68-37-521	12/29/93		
AY 68-37-522	01/27/93		
AY 68-37-522	02/19/93		
AY 68-37-522	02/19/93		
AY 68-37-522	04/01/93		
AY 68-37-522	04/26/93		
AY 68-37-522	05/04/93		
AY 68-37-522	06/30/93		
AY 68-37-522	07/28/93		
AY 68-37-522	09/08/93		
AY 68-37-522	09/27/93		
AY 68-37-522	11/30/93		
AY 68-37-522	12/29/93		
AY 68-37-523	01/27/93		
AY 68-37-523	02/19/93		
AY 68-37-523	02/19/93		
AY 68-37-523	04/01/93		
AY 68-37-523	04/26/93		
AY 68-37-523	05/04/93		
AY 68-37-523	06/30/93		
AY 68-37-523	07/28/93		
AY 68-37-523	09/08/93		
AY 68-37-523	09/27/93		

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smplng Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
AY 68-37-523	11/30/93	11:24	1175	69	18	29	5100	6.8	235	2300	580	230
AY 68-37-523	12/29/93	10:50	1175	60	18	29	5920	6.8	230	2190	540	210
AY 68-37-404	09/28/93	12:15	1326	1440	13800	28	471	7.3	200	240	70	16
AY 68-37-524	01/12/93	16:00	1396	60	20	28	710	7.2	200	300	80	24
AY 68-37-524	02/19/93	14:30	1396	60	20	26	698	7.2	200	290	80	23
AY 68-37-524	02/19/93	14:35	1396	60	20	26	701	7.2	200	290	80	23
AY 68-37-524	04/08/93	14:30	1396	60	20	28.5	698	7.3	200	310	82	25
AY 68-37-524	04/26/93	11:15	1396	60	20	28.5	708	7	200	320	87	25
AY 68-37-524	05/03/93	13:10	1396	79		29	740	6.8	190	330	88	26
AY 68-37-524	06/30/93	13:20	1396	60	20	29.5	738	7.9	190	320	85	26
AY 68-37-524	07/27/93	14:00	1396	60	20	31.5	719	6.6	200	310	84	25
AY 68-37-524	09/07/93	10:44	1396	150	20	28.5	764	7.2	190	330	88	27
AY 68-37-524	09/27/93	10:04	1396	67	20	28.5	778	6.9	190	340	90	28
AY 68-37-524	11/30/93	10:55	1396	85	18	27.5	860	7.3	200	350	96	32
AY 68-37-524	12/29/93	10:25	1396	60	17	26.5	1050	7.6	200	340	94	31
AY 68-37-525	01/12/93	14:00	1150	60	30	29	6320	6.8	250	2400	550	250
AY 68-37-525	02/19/93	14:55	1150	60	25	25.5	6270	6.9	250	2300	540	240
AY 68-37-525	02/19/93	15:00	1150	60	25	25	6290	6.8	240	2400	550	240
AY 68-37-525	04/08/93	15:00	1150	60	25	29.5	6090	6.9	240	2400	550	250
AY 68-37-525	04/26/93	11:45	1150	72	25	29.5	6180	6.7	240	2500	590	240
AY 68-37-525	05/03/93	13:40	1150	84	25	29.5	6020	6.4	240	2400	560	240
AY 68-37-525	06/30/93	13:30	1150	60	25	30.5	5890	7	220	2400	560	240
AY 68-37-525	07/27/93	14:30	1150	60	25	32	5610	6.6	240	2500	600	250
AY 68-37-525	09/07/93	11:09	1150	97	25	29.5	6200	6.7	240	2600	620	250
AY 68-37-525	09/27/93	10:44	1150	104	25	28.5	5970	6.8	230	2700	620	270
AY 68-37-525	11/30/93	10:55	1150	85	25	28.5	5800	6.8	230	2420	620	260
AY 68-37-525	12/29/93	10:15	1150	60	27	27	6340	6.9	230	2390	590	240
AY 68-37-526	01/12/93	10:50	1384	60	25	25.5	902	7.1	200	380	96	33
AY 68-37-526	02/19/93	15:40	1384	60	25	26	997	7.2	210	380	96	33
AY 68-37-526	02/19/93	15:45	1384	60	25	25.5	1000	7.1	210	370	95	33
AY 68-37-526	04/01/93	15:00	1384	60	25	26.5	928	7.6	200	400	99	37
AY 68-37-526	04/21/93	12:55	1384	60	25	26.5	942	7.1	200	390	100	35
AY 68-37-526	05/04/93	12:00	1384	83	25	26	923	7.2	200	390	100	35
AY 68-37-526	06/30/93	14:40	1384	60	25	30	894	7.4	200	380	97	34
AY 68-37-526	07/27/93	12:10	1384	60	25	30	888	6.8	200	380	96	34

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
AY 68-37-523	11/30/93	840	33	1300	2000	6	8.2	4480			
AY 68-37-523	12/29/93	540	50	1010	1800	5.2	8.6	4310			
AY 68-37-404	09/28/93	10	1.2	19	16	0.2	12	271			
AY 68-37-524	01/12/93	29	2.9	49	100	0.8	13	420			
AY 68-37-524	02/19/93	29	3	53	100	0.7	13	423			
AY 68-37-524	02/19/93	29	2.9	52	100	0.7	13	422			
AY 68-37-524	04/08/93	31	3.1	56	110	0.8	14	439			
AY 68-37-524	04/26/93	33	3	58	120	0.8	13	457			
AY 68-37-524	05/03/93	33	3.3	55	110	0.8	13	445			
AY 68-37-524	06/30/93	34	3.4	57	120	0.9	13	456			
AY 68-37-524	07/27/93	34	3.4	57	130	0.9	13	464			
AY 68-37-524	09/07/93	38	3.4	63	130	1	14	481			
AY 68-37-524	09/27/93	38	4.1	63	130	1	14	481			
AY 68-37-524	11/30/93	78	7	85	157	0.6	6.3	456			
AY 68-37-524	12/29/93	56	6	78	160	1.3	5.9	536			
AY 68-37-525	01/12/93	550	31	1100	1900	2	18	4550			
AY 68-37-525	02/19/93	560	31	1100	2000	2.4	19	4640			
AY 68-37-525	02/19/93	550	31	1100	2000	2.3	19	4640			
AY 68-37-525	04/08/93	550	32	1100	1900	2.6	19	4550			
AY 68-37-525	04/26/93	110	30	1100	2000	2.8	18	4240			
AY 68-37-525	05/03/93	530	32	1000	2000	3	17	4530			
AY 68-37-525	06/30/93	570	31	600	2000	2.4	18	4150			
AY 68-37-525	07/27/93	570	26	980	2000	3	18	4590			
AY 68-37-525	09/07/93	560	29	960	2000	3.1	18	4580			
AY 68-37-525	09/27/93	550	31	1100	1900	2.4	19	4630			
AY 68-37-525	11/30/93	1040	38	1350	2200	7	8.5	4890			
AY 68-37-525	12/29/93	750	50	1090	2200	5.2	8.6	4840			
AY 68-37-526	01/12/93	45	3.3	88	170	0.8	12	568			
AY 68-37-526	02/19/93	45	3.4	90	170	0.7	12	575			
AY 68-37-526	02/19/93	46	3.3	110	170	0.7	12	593			
AY 68-37-526	04/01/93	51	3.5	88	28	0.3	12	440			
AY 68-37-526	04/21/93	47	3.4	86	170	1.8	12	576			
AY 68-37-526	05/04/93	47	3.4	84	170	0.8	12	573			
AY 68-37-526	06/30/93	44	3.1	82	160	0.8	12	552			
AY 68-37-526	07/27/93	43	3.3	86	170	0.8	12	567			

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
AY 68-37-523	11/30/93		
AY 68-37-523	12/29/93		
AY 68-37-404	09/28/93	1.8	
AY 68-37-524	01/12/93		
AY 68-37-524	02/19/93		
AY 68-37-524	02/19/93		
AY 68-37-524	04/08/93		
AY 68-37-524	04/26/93		
AY 68-37-524	05/03/93		
AY 68-37-524	06/30/93		
AY 68-37-524	07/27/93		
AY 68-37-524	09/07/93		
AY 68-37-524	09/27/93		
AY 68-37-524	11/30/93		
AY 68-37-524	12/29/93		
AY 68-37-525	01/12/93		
AY 68-37-525	02/19/93		
AY 68-37-525	02/19/93		
AY 68-37-525	04/08/93		
AY 68-37-525	04/26/93		
AY 68-37-525	05/03/93		
AY 68-37-525	06/30/93		
AY 68-37-525	07/27/93		
AY 68-37-525	09/07/93		
AY 68-37-525	09/27/93		
AY 68-37-525	11/30/93		
AY 68-37-525	12/29/93		
AY 68-37-526	01/12/93		
AY 68-37-526	02/19/93		
AY 68-37-526	02/19/93		
AY 68-37-526	04/01/93		
AY 68-37-526	04/21/93		
AY 68-37-526	05/04/93		
AY 68-37-526	06/30/93		
AY 68-37-526	07/27/93		

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smplng Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
AY 68-37-526	09/08/93	09:34	1384	17	25	27	918	7.3	200	390	98	35
AY 68-37-526	09/16/93	15:00	1384	60	25	27	866	7.5	210	390	100	34
AY 68-37-526	11/30/93	10:40	1384	85	16	25.5	900	7.2	210	370	99	36
AY 68-37-526	12/29/93	09:50	1384	60	17	23	970	7.5	200	350	96	34
AY 68-37-527	01/12/93	12:30	926	60	200	26	511	7.2	200	240	68	18
AY 68-37-527	02/17/93	15:30	926	60	200	27	493	7.3	200	230	66	17
AY 68-37-527	02/17/93	15:40	926	60	200	27	495	7.3	200	230	65	17
AY 68-37-527	04/01/93	14:30	926	60	150	26.5	493	7.3	200	240	66	18
AY 68-37-527	04/21/93	12:15	926	60	150	26.5	494	6.9	200	240	69	17
AY 68-37-527	05/04/93	11:16	926	72	150	26.5	493	7.1	200	250	69	18
AY 68-37-527	06/30/93	15:00	926	60	150	30	479	7.5	190	230	66	17
AY 68-37-527	07/27/93	11:55	926	60	100	30	471	6.7	200	230	66	17
AY 68-37-527	09/08/93	10:04	926	60	100	27	466	7.2	200	240	67	17
AY 68-37-527	09/16/93	14:30	926	60	100	28.5	499	7.4	190	240	67	18
AY 68-37-527	11/30/93	10:30	926	75	75	26	508	7.6	230	230	70	19
AY 68-37-527	12/29/93	09:40	926	60	75	24	521	7.6	180	230	67	20
AY 68-36-102	09/28/93	09:35	786	1440	9000	22.5	534	7.1	240	280	87	16
AY 68-28-913	09/29/93	10:00	784	1440	2	23	613	7	250	290	93	15
AY 68-28-905	09/29/93	10:28	856	1440	1800	22.5	627	6.9	270	300	99	14
AY 68-29-702	09/28/93	09:15	872	1440	3500	22	552	7.1	260	300	99	13
AY 68-28-904	09/29/93	09:30	640	1440	1000	22.5	568	6.7	270	280	90	14
AY 68-28-919	09/29/93	11:40	550	17	4200	22.5	597	7	260	290	90	15
AY 68-28-508	09/27/93	12:30	464	1440	150	23.5	480	7.2	240	270	92	9.1
AY 68-29-401	09/27/93	09:30	517	5	650	21.5	583	7.1	280	340	120	10
AY 68-29-410	09/27/93	09:00	318	1440	650	21.5	576	7	280	340	120	8.6
AY 68-28-501	04/06/93	10:30	468	1440	100	22.5	544	6.9	260	300	110	5.4
AY 68-28-205	04/06/93	09:40	485	1440	285	23	677	6.9	300			
AY 68-28-205	04/09/93	09:40	485	1440	285	23	677	6.9	300	360	130	9.5
AY 68-29-109	09/27/93	08:15	460	1440	250	22.5	568	6.8	290	320	110	11
AY 68-28-203	04/06/93	09:00	527	1440	350	22.5	686	6.9	290	320	120	5.9
AY 68-27-303	09/22/93	13:20	354	30	16	24.5	506	6.9	250	280	96	9.4
AY 68-29-303	09/27/93	11:30	527	1440	150	24.5	471	7.3	230	260	94	6.3

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Bexar County

State Well ID Number	Date	Sodium, Dis-solved mg/L as Na	Potas-sium, Dis-solved mg/L as K	Chlo-ride, Dis-solved mg/L as Cl	Sulfate dis-solved mg/L as SO4	Fluo-ride, dis-solved mg/L as F	Silica Dis-solved mg/L as SiO2	Solids, Sum of Consti-tuents, Dis-solved mg/L	Nitro-gen, Ammonia Total mg/L as N	Nitro-gen, Nitrite Total mg/L as N	Nitrogen, Ammon-ia + Org-anic, Tot mg/L as N
AY 68-37-526	09/08/93	47	3	87	170	0.7	12	575			
AY 68-37-526	09/16/93	43	3.4	82	140	0.7	12	539			
AY 68-37-526	11/30/93	92	4	100	170	0.9	5.5	500			
AY 68-37-526	12/29/93	58	5	88	170	0.8	5.3	560			
AY 68-37-527	01/12/93	12	1.3	23	28	0.3	12	282			
AY 68-37-527	02/17/93	12	1.3	23	27	0.2	12	277			
AY 68-37-527	02/17/93	11	1.3	24	27	0.2	12	276			
AY 68-37-527	04/01/93	12	1.3	21	28	0.3	12	277			
AY 68-37-527	04/21/93	12	1.2	24	31	0.3	12	283			
AY 68-37-527	05/04/93	12	1.2	23	27	0.3	12	280			
AY 68-37-527	06/30/93	11	1.1	22	29	0.3	12	274			
AY 68-37-527	07/27/93	11	1.2	23	28	<0.10	12	279			
AY 68-37-527	09/08/93	11	1.1	21	27	0.3	12	274			
AY 68-37-527	09/16/93	12	1.5	23	30	0.3	12	278			
AY 68-37-527	11/30/93	25	2	48	27	0.4	5.5	226			
AY 68-37-527	12/29/93	18	2.5	32	30	0.3	5.3	298			
AY 68-36-102	09/28/93	11	1.6	1.5	32	0.2	13	326			
AY 68-28-913	09/29/93	10	1.2	17	43	0.2	12	352			
AY 68-28-905	09/29/93	11	1.2	16	32	0.2	12	356			
AY 68-29-702	09/28/93	9	1.2	13	27	0.3	12	335			
AY 68-28-904	09/29/93	7.2	1	11	18	0.2	11	319			
AY 68-28-919	09/29/93	11	1.2	14	24	0.2	12	328			
AY 68-28-508	09/27/93	4.9	0.7	8.3	13	0.2	11	288			
AY 68-29-401	09/27/93	9.2	0.9	18	13	0.2	13	362			
AY 68-29-410	09/27/93	10	1	19	12	0.2	13	361			
AY 68-28-501	04/06/93	8.3	1.1	15	5.9	<0.10	14	318			
AY 68-28-205	04/06/93										
AY 68-28-205	04/09/93	9.4	1.1	31	10	0.1	14	385			
AY 68-29-109	09/27/93	11	0.8	20	11	0.2	13	357			
AY 68-28-203	04/06/93	15	0.9	49	12	<0.10	14	400			
AY 68-27-303	09/22/93	5.6	0.8	10	12	0.2	11	308			
AY 68-29-303	09/27/93	5.7	0.7	9	14	0.2	11	287			

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Bexar County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
AY 68-37-526	09/08/93		
AY 68-37-526	09/16/93		
AY 68-37-526	11/30/93		
AY 68-37-526	12/29/93		
AY 68-37-527	01/12/93		
AY 68-37-527	02/17/93		
AY 68-37-527	02/17/93		
AY 68-37-527	04/01/93		
AY 68-37-527	04/21/93		
AY 68-37-527	05/04/93		
AY 68-37-527	06/30/93		
AY 68-37-527	07/27/93		
AY 68-37-527	09/08/93		
AY 68-37-527	09/16/93		
AY 68-37-527	11/30/93		
AY 68-37-527	12/29/93		
AY 68-36-102	09/28/93	2	
AY 68-28-913	09/29/93	1.9	
AY 68-28-905	09/29/93	2	
AY 68-29-702	09/28/93	1.4	
AY 68-28-904	09/29/93	1.2	
AY 68-28-919	09/29/93	1.8	
AY 68-28-508	09/27/93	1.2	
AY 68-29-401	09/27/93	1.7	
AY 68-29-410	09/27/93	1.9	
AY 68-28-501	04/06/93	0.82	
AY 68-28-205	04/06/93	1.2	
AY 68-28-205	04/09/93		
AY 68-29-109	09/27/93	1.8	
AY 68-28-203	04/06/93	2	
AY 68-27-303	09/22/93	2.4	
AY 68-29-303	09/27/93	1.6	

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
DX 68-22-902	08/24/93	14:30	240	1440	850	23	515	7	240	270	89	11
DX 68-22-901	08/24/93	13:50	255	30	1200	23	479	7.1	230	250	81	11
DX 68-23-602	08/23/93	11:05	790	1440	3100	23.5	526	7.1	240	260	83	14
DX 68-23-616A	01/13/93	12:00	576	60	14	25	2980	7	280	810	160	100
DX 68-23-616A	02/16/93	12:00	576	60	14	24	2800	7.1	250	790	160	96
DX 68-23-616A	02/16/93	12:05	576	65	14	23.5	2820	7.1	250	790	160	96
DX 68-23-616A	03/31/93	11:40	576	60	14	25	2960	7.1	260	810	160	100
DX 68-23-616A	04/27/93	11:00	576	60	14	25	2890	7	270	840	170	100
DX 68-23-616A	07/30/93	12:20	576	60	14	26.5	2960	7.3	250	840	170	100
DX 68-23-616A	09/09/93	16:43	576	54	<14	25.5	2800	6.8	260	840	170	100
DX 68-23-616A	09/29/93	10:06	576	66	14	25.5	2860	7.4	280	800	160	97
DX 68-23-616A	11/29/93	14:15	576	60	14	25.5	2890	7	250	800	170	100
DX 68-23-616A	12/15/93	12:35	576	60	14	25	2930	7	270	780	160	100
DX 68-23-616B	01/13/93	12:05	738	60	12	25.5	1730	7.1	220	510	100	63
DX 68-23-616B	02/16/93	12:20	738	80	12	24	1630	7.3	230	490	97	59
DX 68-23-616B	02/16/93	12:25	738	85	12	25	1640	7.3	220	480	95	58
DX 68-23-616B	03/31/93	11:40	738	50	12	26	1720	7.5	220	490	96	61
DX 68-23-616B	04/27/93	11:05	738	60	12	25.5	1710	7.4	230	500	100	60
DX 68-23-616B	07/30/93	12:15	738	60	12	26.5	1660	7.5	220	470	96	57
DX 68-23-616B	09/09/93	17:11	738	82	12	26	1600	7.1	230	480	96	59
DX 68-23-616B	09/29/93	10:34	738	94	12	26	1700	7.6	240	500	100	61
DX 68-23-616B	11/29/93	14:15	738	60	12	26	1700	7.1	220	510	100	65
DX 68-23-616B	12/15/93	12:35	738	60	12	25.5	1700	7.2	230	510	100	63
DX 68-23-617	01/14/93	14:00	916.5	60	13	25.5	538	7.2	220	260	59	27
DX 68-23-617	02/18/93	11:30	916.5	50	13	24.5	547	7.4	220	250	58	26
DX 68-23-617	02/18/93	11:35	916.5	55	13	24.5	553	7.4	220	260	59	27
DX 68-23-617	03/31/93	15:10	916.5	60	13	26	528	7.4	220	260	58	27
DX 68-23-617	04/27/93	13:50	916.5	60	13	26.5	548	7.3	210	260	60	27
DX 68-23-617	06/29/93	12:30	916.5	60	13	29	549	7.4	220	250	59	26
DX 68-23-617	07/30/93	13:30	916.5	60	13	26.5	539	7.3	220	250	59	26
DX 68-23-617	09/09/93	12:10	916.5	110	13	26.5	544	7.2	220	250	57	25
DX 68-23-617	09/28/93	11:28	916.5	99	13	26.5	553	7.4	210	260	60	27
DX 68-23-617	11/29/93	12:50	916.5	60	13	26.5	510	7.3	220	260	59	28
DX 68-23-617	12/15/93	11:20	916.5	60	13	26.5	520	7.4	230	250	61	27
DX 68-23-618	01/14/93	16:00	660	60	13	24.5	620	7.4	200	260	52	32

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Comal County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
DX 68-22-902	08/24/93	6.4	0.8	10	14	0.2	11	293			
DX 68-22-901	08/24/93	4.9	0.9	8.5	8.5	0.1	11	270			
DX 68-23-602	08/23/93	7.8	1.2	12	17	0.3	12	300			
DX 68-23-616A	01/13/93	310	22	530	510	2.8	14	1810			
DX 68-23-616A	02/16/93	310	19	480	500	2.6	14	1730			
DX 68-23-616A	02/16/93	310	19	490	490	2.7	14	1730			
DX 68-23-616A	03/31/93	310	20	460	500	2.6	14	1720			
DX 68-23-616A	04/27/93	310	20	500	560	3	14	1840			
DX 68-23-616A	07/30/93	310	16	500	610	3.2	14	1870			
DX 68-23-616A	09/09/93	320	5.1	510	590	3.2	14	1870			
DX 68-23-616A	09/29/93	320	21	510	560	3.1	14	1850			
DX 68-23-616A	11/29/93	400	23	550	550	7.4	6	1990			
DX 68-23-616A	12/15/93	370	34	500	490	3.5	6	1970			
DX 68-23-616B	01/13/93	150	11	270	290	3.1	13	1030			
DX 68-23-616B	02/16/93	150	10	260	290	2.9	14	1020			
DX 68-23-616B	02/16/93	150	10	260	300	2.9	14	1020			
DX 68-23-616B	03/31/93	150	11	240	280	2.8	13	985			
DX 68-23-616B	04/27/93	150	11	250	290	3	13	1010			
DX 68-23-616B	07/30/93	140	10	250	290	3.1	14	989			
DX 68-23-616B	09/09/93	140	10	260	290	3.2	13	1010			
DX 68-23-616B	09/29/93	150	10	260	290	3.1	13	1030			
DX 68-23-616B	11/29/93	170	10	300	290	4	6	1130			
DX 68-23-616B	12/15/93	190	13	260	290	3.5	6	1050			
DX 68-23-617	01/14/93	11	1.8	18	52	1.3	12	314			
DX 68-23-617	02/18/93	11	2.1	16	51	1.1	13	312			
DX 68-23-617	02/18/93	10	2.1	17	50	1.1	13	312			
DX 68-23-617	03/31/93	11	2.2	15	50	1.1	13	309			
DX 68-23-617	04/27/93	12	1.8	16	53	1.3	13	312			
DX 68-23-617	06/29/93	11	3.4	16	52	1.1	12	313			
DX 68-23-617	07/30/93	10	2.3	17	49	1.2	13	309			
DX 68-23-617	09/09/93	10	1.8	16	50	1.2	13	304			
DX 68-23-617	09/28/93	11	2	15	49	1.2	13	306			
DX 68-23-617	11/29/93	14	2.5	17	34	2	6	356			
DX 68-23-617	12/15/93	33	2.5	20	50	3	6	264			
DX 68-23-618	01/14/93	24	2.6	41	61	2.6	13	350			

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Comal County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
DX 68-22-902	08/24/93	1.7	
DX 68-22-901	08/24/93	1.4	
DX 68-23-602	08/23/93	2.1	
DX 68-23-616A	01/13/93		
DX 68-23-616A	02/16/93		
DX 68-23-616A	02/16/93		
DX 68-23-616A	03/31/93		
DX 68-23-616A	04/27/93		
DX 68-23-616A	07/30/93		
DX 68-23-616A	09/09/93		
DX 68-23-616A	09/29/93		
DX 68-23-616A	11/29/93		
DX 68-23-616A	12/15/93		
DX 68-23-616B	01/13/93		
DX 68-23-616B	02/16/93		
DX 68-23-616B	02/16/93		
DX 68-23-616B	03/31/93		
DX 68-23-616B	04/27/93		
DX 68-23-616B	07/30/93		
DX 68-23-616B	09/09/93		
DX 68-23-616B	09/29/93		
DX 68-23-616B	11/29/93		
DX 68-23-616B	12/15/93		
DX 68-23-617	01/14/93		
DX 68-23-617	02/18/93		
DX 68-23-617	02/18/93		
DX 68-23-617	03/31/93		
DX 68-23-617	04/27/93		
DX 68-23-617	06/29/93		
DX 68-23-617	07/30/93		
DX 68-23-617	09/09/93		
DX 68-23-617	09/28/93		
DX 68-23-617	11/29/93		
DX 68-23-617	12/15/93		
DX 68-23-618	01/14/93		

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Comal County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
DX 68-23-618	02/18/93	12:15	660	95	13	25	618	7.5	210		<0.02	<0.01
DX 68-23-618	02/18/93	12:20	660	100	13	25	616	7.4	210	260	52	32
DX 68-23-618	03/31/93	13:40	660	60	13	25.5	580	7.5	200	270	52	33
DX 68-23-618	04/27/93	12:30	660	60	13	26.5	612	7.5	200	270	54	32
DX 68-23-618	06/29/93	11:00	660	60	13	29	603	7.5	200	260	52	32
DX 68-23-618	07/30/93	10:30	660	60	13	26	577	7.5	210	260	53	32
DX 68-23-618	09/09/93	11:15	660	65	13	26	602	7.4	190	260	52	32
DX 68-23-618	09/28/93	10:31	660	56	13	26	600	7.4	200	260	53	32
DX 68-23-618	11/29/93	12:50	660	60	13	26	580	7.3	200	260	54	34
DX 68-23-618	12/15/93	11:10	660	60	13	26	600	7.4	170	240	54	33
DX 68-23-619A	01/13/93	17:00	652	60	12	25	546	7.3	210	250	52	30
DX 68-23-619A	04/05/93	11:25	652	92	12	25.5	520	7.4	200	250	51	30
DX 68-23-619A	04/27/93	15:00	652	60	12	25	526	7.5	220	260	61	25
DX 68-23-619A	06/29/93	09:30	652	60	12	29.5	525	7.5	210	250	51	29
DX 68-23-619A	07/29/93	11:00	652	60	12	26	498	7.5	210	250	51	30
DX 68-23-619A	09/09/93	14:04	652	60	12	25.5	533	7	200	250	51	30
DX 68-23-619A	09/28/93	14:26	652	92	12	26	531	7.4	210	250	51	30
DX 68-23-619A	11/29/93	11:00	652	60	13	26	500	7.5	200	240	51	31
DX 68-23-619A	12/15/93	12:00	652	60	13	25.5	500	7.5	200	250	54	31
DX 68-23-619B	01/13/93	15:00	787	60	13	25.5	560	7.3	220	250	59	26
DX 68-23-619B	04/05/93	11:15	787	71	13	26	530	7.3	220	260	60	26
DX 68-23-619B	04/27/93	15:10	787	60	13	26	549	7.6	220	260	63	26
DX 68-23-619B	06/29/93	09:45	787	60	13	29.5	548	7.5	220	250	59	25
DX 68-23-619B	07/29/93	11:10	787	60	13	26.5	533	7.5	220	260	61	26
DX 68-23-619B	09/09/93	13:25	787	60	13	26.5	552	7.1	220	250	59	26
DX 68-23-619B	09/28/93	13:53	787	60	13	26.5	549	7.2	220	260	60	26
DX 68-23-619B	11/29/93	11:00	787	60	13	26	520	7.5	220	260	61	27
DX 68-23-619B	12/15/93	12:00	787	60	13	26.5	520	7.4	220	250	60	27
DX 68-23-301	08/20/93	14:30	a/			24	538	7.2	240	260	81	15
DX 68-23-316	09/23/93	13:00	350	30	10	24	531	7.1	260	300	98	13
DX 68-23-305	08/23/93	10:30	102	1440	1200	25	544	7	230	270	80	17
DX 68-15-901	09/23/93	11:45	a/			18	567	7	270	300	98	14
DX 68-16-502	08/26/93	10:45	230	1440	833	25	562	7.2	260	290	89	17

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
DX 68-23-618	02/18/93	<0.20	2.4	39	58	2.4	13				
DX 68-23-618	02/18/93	24	2.5	40	58	2.4	14	348			
DX 68-23-618	03/31/93	25	2.4	36	57	2.4	14	342			
DX 68-23-618	04/27/93	25	2.4	39	60	2.5	14	349			
DX 68-23-618	06/29/93	24	2.5	37	58	2.6	13	343			
DX 68-23-618	07/30/93	26	2.4	40	58	2.4	13	350			
DX 68-23-618	09/09/93	24	2.3	39	59	2.6	13	339			
DX 68-23-618	09/28/93	24	2.5	44	62	2.5	14	353			
DX 68-23-618	11/29/93	39	3	40	41	2.9	6	396			
DX 68-23-618	12/15/93	25	3.5	42	59	3	6	292			
DX 68-23-619A	01/13/93	15	1.7	23	47	2.3	13	308			
DX 68-23-619A	04/05/93	15	1.6	21	43	2.2	13	298			
DX 68-23-619A	04/27/93	12	1.3	18	47	1.4	13	313			
DX 68-23-619A	06/29/93	14	1.6	20	45	2.4	13	300			
DX 68-23-619A	07/29/93	14	1.5	22	43	2.3	13	302			
DX 68-23-619A	09/09/93	14	1.5	20	45	2.4	13	299			
DX 68-23-619A	09/28/93	14	1.7	20	41	2.3	13	297			
DX 68-23-619A	11/29/93	21	2.5	23	28	3.1	6	330			
DX 68-23-619A	12/15/93	43	2.1	26	41	2.5	6	260			
DX 68-23-619B	01/13/93	11	1.4	19	47	1.5	12	310			
DX 68-23-619B	04/05/93	12	1.3	16	47	1.3	13	309			
DX 68-23-619B	04/27/93	13	1.3	18	48	1.4	13	313			
DX 68-23-619B	06/29/93	11	1.2	17	48	1.5	12	308			
DX 68-23-619B	07/29/93	11	1.3	17	47	1.4	12	309			
DX 68-23-619B	09/09/93	11	1.2	16	39	1.2	13	295			
DX 68-23-619B	09/28/93	11	1.4	16	45	1.4	13	303			
DX 68-23-619B	11/29/93	16	2	19	36	2	5	340			
DX 68-23-619B	12/15/93	35	2	22	46	1.4	6	280			
DX 68-23-301	08/20/93	9.2	1.3	14	22	0.2	12	307			
DX 68-23-316	09/23/93	5.6	0.9	8.9	10	0.2	11	312			
DX 68-23-305	08/23/93	11	1.4	15	26	0.3	13	308			
DX 68-15-901	09/23/93	7.8	1.2	12	17	0.3	11	329			
DX 68-16-502	08/26/93	8.8	1.2	13	21	0.2	12	329			

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Comal County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
DX 68-23-618	02/18/93		
DX 68-23-618	02/18/93		
DX 68-23-618	03/31/93		
DX 68-23-618	04/27/93		
DX 68-23-618	06/29/93		
DX 68-23-618	07/30/93		
DX 68-23-618	09/09/93		
DX 68-23-618	09/28/93		
DX 68-23-618	11/29/93		
DX 68-23-618	12/15/93		
DX 68-23-619A	01/13/93		
DX 68-23-619A	04/05/93		
DX 68-23-619A	04/27/93		
DX 68-23-619A	06/29/93		
DX 68-23-619A	07/29/93		
DX 68-23-619A	09/09/93		
DX 68-23-619A	09/28/93		
DX 68-23-619A	11/29/93		
DX 68-23-619A	12/15/93		
DX 68-23-619B	01/13/93		
DX 68-23-619B	04/05/93		
DX 68-23-619B	04/27/93		
DX 68-23-619B	06/29/93		
DX 68-23-619B	07/29/93		
DX 68-23-619B	09/09/93		
DX 68-23-619B	09/28/93		
DX 68-23-619B	11/29/93		
DX 68-23-619B	12/15/93		
DX 68-23-301	08/20/93	2	
DX 68-23-316	09/23/93	1.4	
DX 68-23-305	08/23/93	2	
DX 68-15-901	09/23/93	1.1	
DX 68-16-502	08/26/93	1.9	

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Hays County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
LR 67-09-111	08/26/93	09:30	264	1440	350	23	536	6.9	260	290	91	16
LR 67-01-802	08/30/93	11:00	200	1440	1200	23	535	7	270	290	89	16
LR 67-01-806	08/30/93	10:30	115	1440	1600	23	537	7	270	290	91	16
LR 67-01-801	08/31/93	11:45	a/			22	574	7	260	290	85	18
LR 67-01-302	08/30/93	12:30	360	1440	940	29	701	7.3	230	310	63	37
LR 67-01-308	07/29/93	14:45	765	35	176	25	665	7.1	230	320	64	39
LR 67-01-812	12/13/93	14:10	543	60	10	24	14000	6.4	380	3800	900	460
LR 67-01-813A	12/07/93	15:00	564	60	10	24	14000	6.7	380	4000	880	460
LR 67-01-813B	12/07/93	15:00	699	60	10	25	14000	6.7	370	3900	890	460
LR 67-01-814A	12/07/93	12:15	556	60	8	24	13700	6.8	370	3900	890	470
LR 67-01-814B	12/07/93	12:15	726	60	10	25	13500	6.7	360	4000	880	460
LR 58-58-403	05/11/93	11:10	390	10	800	22.5	584	7.3	280			
LR 58-58-403	08/19/93	12:20	390	1440	800	29	539	7.4	280	290	76	25
LR 58-58-403	08/20/93	08:05	390			23	579	7	270	300	79	25
LR 58-57-311	01/22/93	12:20				22.5	590	6.8	310	310	88	21
LR 58-57-311	01/25/93	13:42				22	589	6.8	300	310	88	21
LR 58-57-311	05/08/93	11:45				22.5	584	7.3	300			
LR 58-57-311	05/11/93	15:00		25		22.5	593	7	310			
LR 58-57-311	05/15/93	08:35		>10		22	589	6.9	300			
LR 58-57-311	08/18/93	12:00		20		17.5	594	6.8	290	320	96	20

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Hays County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
LR 67-09-111	08/26/93	11	1.3	17	23	0.2	12	336			
LR 67-01-802	08/30/93	11	1.2	17	23	0.2	12	336			
LR 67-01-806	08/30/93	12	1.3	20	26	0.2	12	345			
LR 67-01-801	08/31/93	11	1.3	19	24	0.2	11	332			
LR 67-01-302	08/30/93	7.9	1.8	11	140	3.3	13	414			
LR 67-01-308	07/29/93	7.2	1.4	9.8	140	3.3	13	415			
LR 67-01-812	12/13/93	2000	60	4200	3200	4.7	6	10200			
LR 67-01-813A	12/07/93	2500	69	4500	2600	7	12	9900			
LR 67-01-813B	12/07/93	2600	59	4400	2500	4.8	8.2	10200			
LR 67-01-814A	12/07/93	2800	86	4400	2800	6.3	9.4	10300			
LR 67-01-814B	12/07/93	2800	78	4300	2700	4.8	9.7	10200			
LR 58-58-403	05/11/93										
LR 58-58-403	08/19/93	6.3	1.1	10	26	0.5	11	329			
LR 58-58-403	08/20/93	6.6	1.2	10	26	0.5	11	327			
LR 58-57-311	01/22/93	6	0.6	10	6.7	0.2	13	328			<0.20
LR 58-57-311	01/25/93	6	0.6	10	7	0.1	13	328			<0.20
LR 58-57-311	05/08/93										
LR 58-57-311	05/11/93										
LR 58-57-311	05/15/93										
LR 58-57-311	08/18/93	6.1	0.6	9.4	7	0.2	12	333			

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
LR 67-09-111	08/26/93	1.6	
LR 67-01-802	08/30/93	1.5	
LR 67-01-806	08/30/93	1.6	
LR 67-01-801	08/31/93	1	
LR 67-01-302	08/30/93		
LR 67-01-308	07/29/93		
LR 67-01-812	12/13/93		
LR 67-01-813A	12/07/93		
LR 67-01-813B	12/07/93		
LR 67-01-814A	12/07/93		
LR 67-01-814B	12/07/93		
LR 58-58-403	05/11/93	1.3	
LR 58-58-403	08/19/93	1.3	
LR 58-58-403	08/20/93	1.4	
LR 58-57-311	01/22/93		<0.010
LR 58-57-311	01/25/93		<0.010
LR 58-57-311	05/08/93	1.3	
LR 58-57-311	05/11/93	1.4	
LR 58-57-311	05/15/93	1.2	
LR 58-57-311	08/18/93	1.6	

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
TD 68-42-806	09/20/93	10:45	2044	1440	1000	23.5	476	7.3	200	260	78	16
TD 69-46-601	08/02/93	14:10	1289	30	210	26	463	7	210	240	73	14
TD 69-47-303	08/03/93	16:00	1803	1440	1150	27	467	7.2	200	230	67	16
TD 68-41-303	08/02/93	11:15	717	25	776	26	448	7.2	200	230	68	15

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Medina County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
TD 68-42-806	09/20/93	9.5	1.1	22	14	0.3	12	279			
TD 69-46-601	08/02/93	7.6	1.1	13	17	0.3	12	272			
TD 69-47-303	08/03/93	7.8	1.2	16	17	0.2	12	267			
TD 68-41-303	08/02/93	10	1.1	20	17	0.2	12	272			

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Medina County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
TD 68-42-806	09/20/93	1.9	
TD 69-46-601	08/02/93	1.5	
TD 69-47-303	08/03/93	1.6	
TD 68-41-303	08/02/93	2.2	

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Uvalde County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg
YP 69-50-501	09/02/93	09:00	600	1440	805	23	1170	7.1	230	500	170	19
YP 69-50-506	09/29/93	09:00	525	1440	525	23	578	7.3	210	250	88	8.2
YP 69-51-102	08/03/93	14:30	391	30	50	25	696	6.8	240	360	120	14
YP 69-50-207	09/29/93	09:20		1440	1100	23.5	502	7.2	210	240	81	9.4
YP 69-50-203	09/29/93	09:45	525	1440	1400	23	563	7.3	560	250	85	10
YP 69-51-114	08/03/93	13:45	565	15	180	24.5	912	6.2	250	410	140	15
YP 69-43-603	09/02/93	11:30		1440	250	29	480	7.3	200	240	79	10
YP 69-45-404	09/02/93	14:00		10	430	31	471	7.6	210	240	73	14
YP 69-45-405	08/03/93	10:00	1211	1440	520	24	471	7.2	210	240	75	14

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Sodium, Dissolved mg/L as Na	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Ammonia + Organic, Tot mg/L as N
YP 69-50-501	09/02/93	67	1.3	220	100	0.2	16	763			
YP 69-50-506	09/29/93	16	1.5	32	21	0.2	13	323			
YP 69-51-102	08/03/93	22	1.8	49	78	0.9	17	457			
YP 69-50-207	09/29/93	14	1	29	15	0.2	13	299			
YP 69-50-203	09/29/93	17	1	40	17	0.1	13	534			
YP 69-51-114	08/03/93	42	1.5	110	56	0.6	16	560			
YP 69-43-603	09/02/93	12	0.9	25	14	0.1	12	285			
YP 69-45-404	09/02/93	8.9	1	16	20	0.2	13	279			
YP 69-45-405	08/03/93	7.9	1.1	13	19	0.2	13	275			

Data for common constituents, nutrients, selected parameters,
and dissolved organic carbon in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division
Uvalde County

State Well ID Number	Date	Nitrogen NO2 + NO3, Tot mg/L as N	Phos-phorus Total mg/L as P
YP 69-50-501	09/02/93	7.2	
YP 69-50-506	09/29/93	3.3	
YP 69-51-102	08/03/93	1.8	
YP 69-50-207	09/29/93	2.8	
YP 69-50-203	09/29/93	3.1	
YP 69-51-114	08/03/93	6.1	
YP 69-43-603	09/02/93	2.9	
YP 69-45-404	09/02/93	1.9	
YP 69-45-405	08/03/93	1.6	

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
AY 68-37-705	09/28/93	1	120	<1.0	<1	7	<3	1	17	<1.0
AY 68-37-521	01/27/93									
AY 68-37-521	02/19/93									
AY 68-37-521	02/19/93									
AY 68-37-521	04/01/93									
AY 68-37-521	04/26/93									
AY 68-37-521	05/04/93									
AY 68-37-521	06/30/93									
AY 68-37-521	07/28/93									
AY 68-37-521	09/08/93									
AY 68-37-521	09/27/93									
AY 68-37-521	11/30/93									
AY 68-37-521	12/29/93									
AY 68-37-522	01/27/93									
AY 68-37-522	02/19/93									
AY 68-37-522	02/19/93									
AY 68-37-522	04/01/93									
AY 68-37-522	04/26/93									
AY 68-37-522	05/04/93									
AY 68-37-522	06/30/93									
AY 68-37-522	07/28/93									
AY 68-37-522	09/08/93									
AY 68-37-522	09/27/93									
AY 68-37-522	11/30/93									
AY 68-37-522	12/29/93									
AY 68-37-523	01/27/93									
AY 68-37-523	02/19/93									
AY 68-37-523	02/19/93									
AY 68-37-523	04/01/93									
AY 68-37-523	04/26/93									
AY 68-37-523	05/04/93									
AY 68-37-523	06/30/93									
AY 68-37-523	07/28/93									
AY 68-37-523	09/08/93									
AY 68-37-523	09/27/93									

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
AY 68-37-705	09/28/93	5	<1	<0.1
AY 68-37-521	01/27/93			
AY 68-37-521	02/19/93			
AY 68-37-521	02/19/93			
AY 68-37-521	04/01/93			
AY 68-37-521	04/26/93			
AY 68-37-521	05/04/93			
AY 68-37-521	06/30/93			
AY 68-37-521	07/28/93			
AY 68-37-521	09/08/93			
AY 68-37-521	09/27/93			
AY 68-37-521	11/30/93			
AY 68-37-521	12/29/93			
AY 68-37-522	01/27/93			
AY 68-37-522	02/19/93			
AY 68-37-522	02/19/93			
AY 68-37-522	04/01/93			
AY 68-37-522	04/26/93			
AY 68-37-522	05/04/93			
AY 68-37-522	06/30/93			
AY 68-37-522	07/28/93			
AY 68-37-522	09/08/93			
AY 68-37-522	09/27/93			
AY 68-37-522	11/30/93			
AY 68-37-522	12/29/93			
AY 68-37-523	01/27/93			
AY 68-37-523	02/19/93			
AY 68-37-523	02/19/93			
AY 68-37-523	04/01/93			
AY 68-37-523	04/26/93			
AY 68-37-523	05/04/93			
AY 68-37-523	06/30/93			
AY 68-37-523	07/28/93			
AY 68-37-523	09/08/93			
AY 68-37-523	09/27/93			

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
AY 68-37-523	11/30/93									
AY 68-37-523	12/29/93									
AY 68-37-404	09/28/93	1	56	<1	<1	5	<3	<1	<1	<1.0
AY 68-37-524	01/12/93									
AY 68-37-524	02/19/93									
AY 68-37-524	02/19/93									
AY 68-37-524	04/08/93									
AY 68-37-524	04/26/93									
AY 68-37-524	05/03/93									
AY 68-37-524	06/30/93									
AY 68-37-524	07/27/93									
AY 68-37-524	09/07/93									
AY 68-37-524	09/27/93									
AY 68-37-524	11/30/93									
AY 68-37-524	12/29/93									
AY 68-37-525	01/12/93									
AY 68-37-525	02/19/93									
AY 68-37-525	02/19/93									
AY 68-37-525	04/08/93									
AY 68-37-525	04/26/93									
AY 68-37-525	05/03/93									
AY 68-37-525	06/30/93									
AY 68-37-525	07/27/93									
AY 68-37-525	09/07/93									
AY 68-37-525	09/27/93									
AY 68-37-525	11/30/93									
AY 68-37-525	12/29/93									
AY 68-37-526	01/12/93									
AY 68-37-526	02/19/93									
AY 68-37-526	02/19/93									
AY 68-37-526	04/01/93									
AY 68-37-526	04/21/93									
AY 68-37-526	05/04/93									
AY 68-37-526	06/30/93									
AY 68-37-526	07/27/93									

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg
AY 68-37-523	11/30/93			
AY 68-37-523	12/29/93			
AY 68-37-404	09/28/93	13	<1	<0.1
AY 68-37-524	01/12/93			
AY 68-37-524	02/19/93			
AY 68-37-524	02/19/93			
AY 68-37-524	04/08/93			
AY 68-37-524	04/26/93			
AY 68-37-524	05/03/93			
AY 68-37-524	06/30/93			
AY 68-37-524	07/27/93			
AY 68-37-524	09/07/93			
AY 68-37-524	09/27/93			
AY 68-37-524	11/30/93			
AY 68-37-524	12/29/93			
AY 68-37-525	01/12/93			
AY 68-37-525	02/19/93			
AY 68-37-525	02/19/93			
AY 68-37-525	04/08/93			
AY 68-37-525	04/26/93			
AY 68-37-525	05/03/93			
AY 68-37-525	06/30/93			
AY 68-37-525	07/27/93			
AY 68-37-525	09/07/93			
AY 68-37-525	09/27/93			
AY 68-37-525	11/30/93			
AY 68-37-525	12/29/93			
AY 68-37-526	01/12/93			
AY 68-37-526	02/19/93			
AY 68-37-526	02/19/93			
AY 68-37-526	04/01/93			
AY 68-37-526	04/21/93			
AY 68-37-526	05/04/93			
AY 68-37-526	06/30/93			
AY 68-37-526	07/27/93			

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
AY 68-37-526	09/08/93									
AY 68-37-526	09/16/93									
AY 68-37-526	11/30/93									
AY 68-37-526	12/29/93									
AY 68-37-527	01/12/93									
AY 68-37-527	02/17/93									
AY 68-37-527	02/17/93									
AY 68-37-527	04/01/93									
AY 68-37-527	04/21/93									
AY 68-37-527	05/04/93									
AY 68-37-527	06/30/93									
AY 68-37-527	07/27/93									
AY 68-37-527	09/08/93									
AY 68-37-527	09/16/93									
AY 68-37-527	11/30/93									
AY 68-37-527	12/29/93									
AY 68-36-102	09/28/93	<1	37	<1.0	<1	5	<3		1	<1 <1.0
AY 68-28-913	09/29/93	<1	34	<1.0	<1	12	<3	<1		<1 <1.0
AY 68-28-905	09/29/93	<1	36	<1.0	<1	7	<3	<1		<1 <1.0
AY 68-29-702	09/28/93	<1	33	<1.0	<1	12	<3		1	<1 <1.0
AY 68-28-904	09/29/93	<1	31	<1.0	<1	6	<3	<1		<1 <1.0
AY 68-28-919	09/29/93	<1	36	<1.0	<1	3	<3	<1		<1 <1.0
AY 68-28-508	09/27/93	<1	28	<1.0	<1	4	<3	<1		<1 <1.0
AY 68-29-401	09/27/93	<1	40	<1.0	<1	46	<3	<1		<1 <1.0
AY 68-29-410	09/27/93	<1	40	<1.0	<1	21	10		4	<1 <1.0
AY 68-28-501	04/06/93	<1	39	<1.0	<1	14	47		2	6 <1.0
AY 68-28-205	04/06/93									
AY 68-28-205	04/09/93	<1	47	<1.0	<1	2	11	<1		100 <1.0
AY 68-29-109	09/27/93	<1	45	<1.0	<1	21	3		3	<1 <1.0
AY 68-28-203	04/06/93	<1	52	<1.0	<1	9	4		1	<1 <1.0
AY 68-27-303	09/22/93	<1	31	<1.0	<1	2	430		3	13 <1.0
AY 68-29-303	09/27/93	<1	27	<1.0	<1	4	<3	<1		<1 <1.0

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg	
AY 68-37-526	09/08/93				
AY 68-37-526	09/16/93				
AY 68-37-526	11/30/93				
AY 68-37-526	12/29/93				
AY 68-37-527	01/12/93				
AY 68-37-527	02/17/93				
AY 68-37-527	02/17/93				
AY 68-37-527	04/01/93				
AY 68-37-527	04/21/93				
AY 68-37-527	05/04/93				
AY 68-37-527	06/30/93				
AY 68-37-527	07/27/93				
AY 68-37-527	09/08/93				
AY 68-37-527	09/16/93				
AY 68-37-527	11/30/93				
AY 68-37-527	12/29/93				
AY 68-36-102	09/28/93	12	<1	<0.1	
AY 68-28-913	09/29/93	17	<1		0.8
AY 68-28-905	09/29/93	4	<1	<0.1	
AY 68-29-702	09/28/93	12	<1	<0.1	
AY 68-28-904	09/29/93	5	<1		0.1
AY 68-28-919	09/29/93	5	<1		0.1
AY 68-28-508	09/27/93	7	<1	<0.1	
AY 68-29-401	09/27/93	13	<1	<0.1	
AY 68-29-410	09/27/93	33	<1	<0.1	
AY 68-28-501	04/06/93	23	<1	<0.1	
AY 68-28-205	04/06/93				
AY 68-28-205	04/09/93	11	<1	<0.1	
AY 68-29-109	09/27/93	22	<1	<0.1	
AY 68-28-203	04/06/93	12	<1	<0.1	
AY 68-27-303	09/22/93	440	<1	<0.1	
AY 68-29-303	09/27/93	6	<1	<0.1	

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
DX 68-22-902	08/24/93	<1	28	<1.0	<1	5	4	<1	<1	<1.0
DX 68-22-901	08/24/93	<1	26	<1.0	<1	6	<3	<1	<1	<1.0
DX 68-23-602	08/23/93	<1	37	<1.0	<1	13	<3	<1	<1	<1.0
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg
DX 68-22-902	08/24/93	<3	<1	<0.1
DX 68-22-901	08/24/93	9	<1	<0.1
DX 68-23-602	08/23/93	17	<1	<0.1
DX 68-23-616A	01/13/93			
DX 68-23-616A	02/16/93			
DX 68-23-616A	02/16/93			
DX 68-23-616A	03/31/93			
DX 68-23-616A	04/27/93			
DX 68-23-616A	07/30/93			
DX 68-23-616A	09/09/93			
DX 68-23-616A	09/29/93			
DX 68-23-616A	11/29/93			
DX 68-23-616A	12/15/93			
DX 68-23-616B	01/13/93			
DX 68-23-616B	02/16/93			
DX 68-23-616B	02/16/93			
DX 68-23-616B	03/31/93			
DX 68-23-616B	04/27/93			
DX 68-23-616B	07/30/93			
DX 68-23-616B	09/09/93			
DX 68-23-616B	09/29/93			
DX 68-23-616B	11/29/93			
DX 68-23-616B	12/15/93			
DX 68-23-617	01/14/93			
DX 68-23-617	02/18/93			
DX 68-23-617	02/18/93			
DX 68-23-617	03/31/93			
DX 68-23-617	04/27/93			
DX 68-23-617	06/29/93			
DX 68-23-617	07/30/93			
DX 68-23-617	09/09/93			
DX 68-23-617	09/28/93			
DX 68-23-617	11/29/93			
DX 68-23-617	12/15/93			
DX 68-23-618	01/14/93			

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93	<1	43	<1.0	<1	<1	<3	<1	<1	<1.0
DX 68-23-316	09/23/93	<1	33	<1.0	<1	2	5	7	<1	<1.0
DX 68-23-305	08/23/93	<1	53	<1.0	<1	5	<3	<1	<1	<1.0
DX 68-15-901	09/23/93	<1	32	<1.0	<1	<1	61	<1	4	<1.0
DX 68-16-502	08/26/93	<1	39	<1.0	<1	13	<3	2	<1	<1.0

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg
DX 68-23-618	02/18/93			
DX 68-23-618	02/18/93			
DX 68-23-618	03/31/93			
DX 68-23-618	04/27/93			
DX 68-23-618	06/29/93			
DX 68-23-618	07/30/93			
DX 68-23-618	09/09/93			
DX 68-23-618	09/28/93			
DX 68-23-618	11/29/93			
DX 68-23-618	12/15/93			
DX 68-23-619A	01/13/93			
DX 68-23-619A	04/05/93			
DX 68-23-619A	04/27/93			
DX 68-23-619A	06/29/93			
DX 68-23-619A	07/29/93			
DX 68-23-619A	09/09/93			
DX 68-23-619A	09/28/93			
DX 68-23-619A	11/29/93			
DX 68-23-619A	12/15/93			
DX 68-23-619B	01/13/93			
DX 68-23-619B	04/05/93			
DX 68-23-619B	04/27/93			
DX 68-23-619B	06/29/93			
DX 68-23-619B	07/29/93			
DX 68-23-619B	09/09/93			
DX 68-23-619B	09/28/93			
DX 68-23-619B	11/29/93			
DX 68-23-619B	12/15/93			
DX 68-23-301	08/20/93	<3	<1	<0.1
DX 68-23-316	09/23/93	630	<1	<0.1
DX 68-23-305	08/23/93	33	<1	<0.1
DX 68-15-901	09/23/93	3	<1	<0.1
DX 68-16-502	08/26/93	4	<1	<0.1

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
LR 67-09-111	08/26/93	<1	38	<1.0	<1	3	<3	<1	<1	<1.0
LR 67-01-802	08/30/93	<1	37	<1.0	<1	21	17	9	<1	<1.0
LR 67-01-806	08/30/93	<1	38	<1.0	<1	11	5	2	<1	<1.0
LR 67-01-801	08/31/93	<1	32	<1.0	<1	<1	<3	<1	<1	<1.0
LR 67-01-302	08/30/93	<1	56	<1.0	<1	1	<3	<1	15	<1.0
LR 67-01-308	07/29/93	<1	57	<1.0	<1	4	9	<1	<1	<1.0
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93	<1	38	<1.0	<1					
LR 58-58-403	08/19/93	<1	150	<1.0	<1	13	<3	2	<1	<1.0
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93									
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93									
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
LR 67-09-111	08/26/93	8	<1	<0.1
LR 67-01-802	08/30/93	22	<1	<0.1
LR 67-01-806	08/30/93	18	<1	<0.1
LR 67-01-801	08/31/93	6	<1	<0.1
LR 67-01-302	08/30/93	20	<1	<0.1
LR 67-01-308	07/29/93	15	<1	<0.1
LR 67-01-812	12/13/93			
LR 67-01-813A	12/07/93			
LR 67-01-813B	12/07/93			
LR 67-01-814A	12/07/93			
LR 67-01-814B	12/07/93			
LR 58-58-403	05/11/93			
LR 58-58-403	08/19/93	68	<1	<0.1
LR 58-58-403	08/20/93			
LR 58-57-311	01/22/93			
LR 58-57-311	01/25/93			
LR 58-57-311	05/08/93			
LR 58-57-311	05/11/93			
LR 58-57-311	05/15/93			
LR 58-57-311	08/18/93			

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
TD 68-42-806	09/20/93	<1	73	<1.0	<1	62	550	5	14	<1.0
TD 69-46-601	08/02/93	<1	37	<1.0	<1	3	<3	<1	<1	<1.0
TD 69-47-303	08/03/93	<1	42	<1.0	<1	2	<3	1	<1	<1.0
TD 68-41-303	08/02/93	<1	46	<1.0	<1	36	<3	<1	<1	<1.0

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg	
TD 68-42-806	09/20/93	33	<1	<0.1	
TD 69-46-601	08/02/93	6	<1		0.1
TD 69-47-303	08/03/93	53	<1	<0.1	
TD 68-41-303	08/02/93	42	<1		0.1

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag
YP 69-50-501	09/02/93	<1	98	<1.0	<1	9	12	6	<1	<1.0
YP 69-50-506	09/29/93	<1	63	<1.0	<1	70	5	13	<1	<1.0
YP 69-51-102	08/03/93	<1	82	<1.0	<1	3	6	2	<1	<1.0
YP 69-50-207	09/29/93	<1	50	<1.0	<1	18	4	4	<1	<1.0
YP 69-50-203	09/29/93	<1	52	<1.0	<1	14	<3	3	<1	<1.0
YP 69-51-114	08/03/93	<1	110	<1.0	<1	4	4	1	<1	<1.0
YP 69-43-603	09/02/93	<1	49	<1.0	<1	16	6	2	<1	<1.0
YP 69-45-404	09/02/93	<1	37	<1.0	<1	17	10	10	2	<1.0
YP 69-45-405	08/03/93	<1	35	<1.0	<1	9	<3	1	<1	<1.0

Data for minor elements in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg	
YP 69-50-501	09/02/93	35	1	<0.1	
YP 69-50-506	09/29/93	21	<1	<0.1	
YP 69-51-102	08/03/93	24	<1	<0.1	
YP 69-50-207	09/29/93	14	<1		0.3
YP 69-50-203	09/29/93	17	<1		0.1
YP 69-51-114	08/03/93	180	1	<0.1	
YP 69-43-603	09/02/93	17	<1	<0.1	
YP 69-45-404	09/02/93	32	<1	<0.1	
YP 69-45-405	08/03/93	10	<1	<0.1	

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
AY 68-37-705	09/28/93								
AY 68-37-521	01/27/93								
AY 68-37-521	02/19/93								
AY 68-37-521	02/19/93								
AY 68-37-521	04/01/93								
AY 68-37-521	04/26/93								
AY 68-37-521	05/04/93								
AY 68-37-521	06/30/93								
AY 68-37-521	07/28/93								
AY 68-37-521	09/08/93								
AY 68-37-521	09/27/93								
AY 68-37-521	11/30/93								
AY 68-37-521	12/29/93								
AY 68-37-522	01/27/93								
AY 68-37-522	02/19/93								
AY 68-37-522	02/19/93								
AY 68-37-522	04/01/93								
AY 68-37-522	04/26/93								
AY 68-37-522	05/04/93								
AY 68-37-522	06/30/93								
AY 68-37-522	07/28/93								
AY 68-37-522	09/08/93								
AY 68-37-522	09/27/93								
AY 68-37-522	11/30/93								
AY 68-37-522	12/29/93								
AY 68-37-523	01/27/93								
AY 68-37-523	02/19/93								
AY 68-37-523	02/19/93								
AY 68-37-523	04/01/93								
AY 68-37-523	04/26/93								
AY 68-37-523	05/04/93								
AY 68-37-523	06/30/93								
AY 68-37-523	07/28/93								
AY 68-37-523	09/08/93								
AY 68-37-523	09/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Dieldrin Total ug/L	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L
AY 68-37-705	09/28/93									
AY 68-37-521	01/27/93									
AY 68-37-521	02/19/93									
AY 68-37-521	02/19/93									
AY 68-37-521	04/01/93									
AY 68-37-521	04/26/93									
AY 68-37-521	05/04/93									
AY 68-37-521	06/30/93									
AY 68-37-521	07/28/93									
AY 68-37-521	09/08/93									
AY 68-37-521	09/27/93									
AY 68-37-521	11/30/93									
AY 68-37-521	12/29/93									
AY 68-37-522	01/27/93									
AY 68-37-522	02/19/93									
AY 68-37-522	02/19/93									
AY 68-37-522	04/01/93									
AY 68-37-522	04/26/93									
AY 68-37-522	05/04/93									
AY 68-37-522	06/30/93									
AY 68-37-522	07/28/93									
AY 68-37-522	09/08/93									
AY 68-37-522	09/27/93									
AY 68-37-522	11/30/93									
AY 68-37-522	12/29/93									
AY 68-37-523	01/27/93									
AY 68-37-523	02/19/93									
AY 68-37-523	02/19/93									
AY 68-37-523	04/01/93									
AY 68-37-523	04/26/93									
AY 68-37-523	05/04/93									
AY 68-37-523	06/30/93									
AY 68-37-523	07/28/93									
AY 68-37-523	09/08/93									
AY 68-37-523	09/27/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Para-thion, Total ug/L	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
AY 68-37-705	09/28/93								
AY 68-37-521	01/27/93								
AY 68-37-521	02/19/93								
AY 68-37-521	02/19/93								
AY 68-37-521	04/01/93								
AY 68-37-521	04/26/93								
AY 68-37-521	05/04/93								
AY 68-37-521	06/30/93								
AY 68-37-521	07/28/93								
AY 68-37-521	09/08/93								
AY 68-37-521	09/27/93								
AY 68-37-521	11/30/93								
AY 68-37-521	12/29/93								
AY 68-37-522	01/27/93								
AY 68-37-522	02/19/93								
AY 68-37-522	02/19/93								
AY 68-37-522	04/01/93								
AY 68-37-522	04/26/93								
AY 68-37-522	05/04/93								
AY 68-37-522	06/30/93								
AY 68-37-522	07/28/93								
AY 68-37-522	09/08/93								
AY 68-37-522	09/27/93								
AY 68-37-522	11/30/93								
AY 68-37-522	12/29/93								
AY 68-37-523	01/27/93								
AY 68-37-523	02/19/93								
AY 68-37-523	02/19/93								
AY 68-37-523	04/01/93								
AY 68-37-523	04/26/93								
AY 68-37-523	05/04/93								
AY 68-37-523	06/30/93								
AY 68-37-523	07/28/93								
AY 68-37-523	09/08/93								
AY 68-37-523	09/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
AY 68-37-523	11/30/93								
AY 68-37-523	12/29/93								
AY 68-37-404	09/28/93								
AY 68-37-524	01/12/93								
AY 68-37-524	02/19/93								
AY 68-37-524	02/19/93								
AY 68-37-524	04/08/93								
AY 68-37-524	04/26/93								
AY 68-37-524	05/03/93								
AY 68-37-524	06/30/93								
AY 68-37-524	07/27/93								
AY 68-37-524	09/07/93								
AY 68-37-524	09/27/93								
AY 68-37-524	11/30/93								
AY 68-37-524	12/29/93								
AY 68-37-525	01/12/93								
AY 68-37-525	02/19/93								
AY 68-37-525	02/19/93								
AY 68-37-525	04/08/93								
AY 68-37-525	04/26/93								
AY 68-37-525	05/03/93								
AY 68-37-525	06/30/93								
AY 68-37-525	07/27/93								
AY 68-37-525	09/07/93								
AY 68-37-525	09/27/93								
AY 68-37-525	11/30/93								
AY 68-37-525	12/29/93								
AY 68-37-526	01/12/93								
AY 68-37-526	02/19/93								
AY 68-37-526	02/19/93								
AY 68-37-526	04/01/93								
AY 68-37-526	04/21/93								
AY 68-37-526	05/04/93								
AY 68-37-526	06/30/93								
AY 68-37-526	07/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Dieldrin Total ug/L	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L
AY 68-37-523	11/30/93									
AY 68-37-523	12/29/93									
AY 68-37-404	09/28/93									
AY 68-37-524	01/12/93									
AY 68-37-524	02/19/93									
AY 68-37-524	02/19/93									
AY 68-37-524	04/08/93									
AY 68-37-524	04/26/93									
AY 68-37-524	05/03/93									
AY 68-37-524	06/30/93									
AY 68-37-524	07/27/93									
AY 68-37-524	09/07/93									
AY 68-37-524	09/27/93									
AY 68-37-524	11/30/93									
AY 68-37-524	12/29/93									
AY 68-37-525	01/12/93									
AY 68-37-525	02/19/93									
AY 68-37-525	02/19/93									
AY 68-37-525	04/08/93									
AY 68-37-525	04/26/93									
AY 68-37-525	05/03/93									
AY 68-37-525	06/30/93									
AY 68-37-525	07/27/93									
AY 68-37-525	09/07/93									
AY 68-37-525	09/27/93									
AY 68-37-525	11/30/93									
AY 68-37-525	12/29/93									
AY 68-37-526	01/12/93									
AY 68-37-526	02/19/93									
AY 68-37-526	02/19/93									
AY 68-37-526	04/01/93									
AY 68-37-526	04/21/93									
AY 68-37-526	05/04/93									
AY 68-37-526	06/30/93									
AY 68-37-526	07/27/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Para-thion, Total ug/L	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
AY 68-37-523	11/30/93								
AY 68-37-523	12/29/93								
AY 68-37-404	09/28/93								
AY 68-37-524	01/12/93								
AY 68-37-524	02/19/93								
AY 68-37-524	02/19/93								
AY 68-37-524	04/08/93								
AY 68-37-524	04/26/93								
AY 68-37-524	05/03/93								
AY 68-37-524	06/30/93								
AY 68-37-524	07/27/93								
AY 68-37-524	09/07/93								
AY 68-37-524	09/27/93								
AY 68-37-524	11/30/93								
AY 68-37-524	12/29/93								
AY 68-37-525	01/12/93								
AY 68-37-525	02/19/93								
AY 68-37-525	02/19/93								
AY 68-37-525	04/08/93								
AY 68-37-525	04/26/93								
AY 68-37-525	05/03/93								
AY 68-37-525	06/30/93								
AY 68-37-525	07/27/93								
AY 68-37-525	09/07/93								
AY 68-37-525	09/27/93								
AY 68-37-525	11/30/93								
AY 68-37-525	12/29/93								
AY 68-37-526	01/12/93								
AY 68-37-526	02/19/93								
AY 68-37-526	02/19/93								
AY 68-37-526	04/01/93								
AY 68-37-526	04/21/93								
AY 68-37-526	05/04/93								
AY 68-37-526	06/30/93								
AY 68-37-526	07/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
AY 68-37-526	09/08/93								
AY 68-37-526	09/16/93								
AY 68-37-526	11/30/93								
AY 68-37-526	12/29/93								
AY 68-37-527	01/12/93								
AY 68-37-527	02/17/93								
AY 68-37-527	02/17/93								
AY 68-37-527	04/01/93								
AY 68-37-527	04/21/93								
AY 68-37-527	05/04/93								
AY 68-37-527	06/30/93								
AY 68-37-527	07/27/93								
AY 68-37-527	09/08/93								
AY 68-37-527	09/16/93								
AY 68-37-527	11/30/93								
AY 68-37-527	12/29/93								
AY 68-36-102	09/28/93								
AY 68-28-913	09/29/93								
AY 68-28-905	09/29/93								
AY 68-29-702	09/28/93								
AY 68-28-904	09/29/93								
AY 68-28-919	09/29/93								
AY 68-28-508	09/27/93								
AY 68-29-401	09/27/93								
AY 68-29-410	09/27/93								
AY 68-28-501	04/06/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
AY 68-28-205	04/06/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
AY 68-28-205	04/09/93								
AY 68-29-109	09/27/93								
AY 68-28-203	04/06/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
AY 68-27-303	09/22/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
AY 68-29-303	09/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Dieldrin Total ug/L	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L
AY 68-37-526	09/08/93									
AY 68-37-526	09/16/93									
AY 68-37-526	11/30/93									
AY 68-37-526	12/29/93									
AY 68-37-527	01/12/93									
AY 68-37-527	02/17/93									
AY 68-37-527	02/17/93									
AY 68-37-527	04/01/93									
AY 68-37-527	04/21/93									
AY 68-37-527	05/04/93									
AY 68-37-527	06/30/93									
AY 68-37-527	07/27/93									
AY 68-37-527	09/08/93									
AY 68-37-527	09/16/93									
AY 68-37-527	11/30/93									
AY 68-37-527	12/29/93									
AY 68-36-102	09/28/93									
AY 68-28-913	09/29/93									
AY 68-28-905	09/29/93									
AY 68-29-702	09/28/93									
AY 68-28-904	09/29/93									
AY 68-28-919	09/29/93									
AY 68-28-508	09/27/93									
AY 68-29-401	09/27/93									
AY 68-29-410	09/27/93									
AY 68-28-501	04/06/93	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<.1	<0.01
AY 68-28-205	04/06/93	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<.1	<0.01
AY 68-28-205	04/09/93									
AY 68-29-109	09/27/93									
AY 68-28-203	04/06/93	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<.1	<0.01
AY 68-27-303	09/22/93	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<.1	<0.01
AY 68-29-303	09/27/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Para-thion, Total ug/L	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
AY 68-37-526	09/08/93								
AY 68-37-526	09/16/93								
AY 68-37-526	11/30/93								
AY 68-37-526	12/29/93								
AY 68-37-527	01/12/93								
AY 68-37-527	02/17/93								
AY 68-37-527	02/17/93								
AY 68-37-527	04/01/93								
AY 68-37-527	04/21/93								
AY 68-37-527	05/04/93								
AY 68-37-527	06/30/93								
AY 68-37-527	07/27/93								
AY 68-37-527	09/08/93								
AY 68-37-527	09/16/93								
AY 68-37-527	11/30/93								
AY 68-37-527	12/29/93								
AY 68-36-102	09/28/93								
AY 68-28-913	09/29/93								
AY 68-28-905	09/29/93								
AY 68-29-702	09/28/93								
AY 68-28-904	09/29/93								
AY 68-28-919	09/29/93								
AY 68-28-508	09/27/93								
AY 68-29-401	09/27/93								
AY 68-29-410	09/27/93								
AY 68-28-501	04/06/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AY 68-28-205	04/06/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AY 68-28-205	04/09/93								
AY 68-29-109	09/27/93								
AY 68-28-203	04/06/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AY 68-27-303	09/22/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AY 68-29-303	09/27/93								

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Perthane Total ug/L	Naphthalenes, Polychlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L	Dieldrin Total ug/L
DX 68-22-902	08/24/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-22-901	08/24/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-23-602	08/23/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L	Para-thion, Total ug/L
DX 68-22-902	08/24/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-22-901	08/24/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-23-602	08/23/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
DX 68-22-902	08/24/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-22-901	08/24/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-23-602	08/23/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-23-616A	01/13/93							
DX 68-23-616A	02/16/93							
DX 68-23-616A	02/16/93							
DX 68-23-616A	03/31/93							
DX 68-23-616A	04/27/93							
DX 68-23-616A	07/30/93							
DX 68-23-616A	09/09/93							
DX 68-23-616A	09/29/93							
DX 68-23-616A	11/29/93							
DX 68-23-616A	12/15/93							
DX 68-23-616B	01/13/93							
DX 68-23-616B	02/16/93							
DX 68-23-616B	02/16/93							
DX 68-23-616B	03/31/93							
DX 68-23-616B	04/27/93							
DX 68-23-616B	07/30/93							
DX 68-23-616B	09/09/93							
DX 68-23-616B	09/29/93							
DX 68-23-616B	11/29/93							
DX 68-23-616B	12/15/93							
DX 68-23-617	01/14/93							
DX 68-23-617	02/18/93							
DX 68-23-617	02/18/93							
DX 68-23-617	03/31/93							
DX 68-23-617	04/27/93							
DX 68-23-617	06/29/93							
DX 68-23-617	07/30/93							
DX 68-23-617	09/09/93							
DX 68-23-617	09/28/93							
DX 68-23-617	11/29/93							
DX 68-23-617	12/15/93							
DX 68-23-618	01/14/93							

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L	Dieldrin Total ug/L
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-23-316	09/23/93									
DX 68-23-305	08/23/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-15-901	09/23/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
DX 68-16-502	08/26/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L	Para-thion, Total ug/L
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-23-316	09/23/93									
DX 68-23-305	08/23/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-15-901	09/23/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01
DX 68-16-502	08/26/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	>0.01

Data for pesticides in water from Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
DX 68-23-618	02/18/93							
DX 68-23-618	02/18/93							
DX 68-23-618	03/31/93							
DX 68-23-618	04/27/93							
DX 68-23-618	06/29/93							
DX 68-23-618	07/30/93							
DX 68-23-618	09/09/93							
DX 68-23-618	09/28/93							
DX 68-23-618	11/29/93							
DX 68-23-618	12/15/93							
DX 68-23-619A	01/13/93							
DX 68-23-619A	04/05/93							
DX 68-23-619A	04/27/93							
DX 68-23-619A	06/29/93							
DX 68-23-619A	07/29/93							
DX 68-23-619A	09/09/93							
DX 68-23-619A	09/28/93							
DX 68-23-619A	11/29/93							
DX 68-23-619A	12/15/93							
DX 68-23-619B	01/13/93							
DX 68-23-619B	04/05/93							
DX 68-23-619B	04/27/93							
DX 68-23-619B	06/29/93							
DX 68-23-619B	07/29/93							
DX 68-23-619B	09/09/93							
DX 68-23-619B	09/28/93							
DX 68-23-619B	11/29/93							
DX 68-23-619B	12/15/93							
DX 68-23-301	08/20/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-23-316	09/23/93							
DX 68-23-305	08/23/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-15-901	09/23/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX 68-16-502	08/26/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Perthane Total ug/L	Naphthalenes, Polychlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L	Dieldrin Total ug/L
LR 67-09-111	08/26/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-802	08/30/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-806	08/30/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-801	08/31/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-302	08/30/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-308	07/29/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93									
LR 58-58-403	08/19/93	<0.1	<0.1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93									
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93									
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L	Para-thion, Total ug/L
LR 67-09-111	08/26/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-802	08/30/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-806	08/30/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-801	08/31/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-302	08/30/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-308	07/29/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93									
LR 58-58-403	08/19/93	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93									
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93									
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
LR 67-09-111	08/26/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-802	08/30/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-806	08/30/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-801	08/31/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-302	08/30/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-308	07/29/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 67-01-812	12/13/93							
LR 67-01-813A	12/07/93							
LR 67-01-813B	12/07/93							
LR 67-01-814A	12/07/93							
LR 67-01-814B	12/07/93							
LR 58-58-403	05/11/93							
LR 58-58-403	08/19/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR 58-58-403	08/20/93							
LR 58-57-311	01/22/93							
LR 58-57-311	01/25/93							
LR 58-57-311	05/08/93							
LR 58-57-311	05/11/93							
LR 58-57-311	05/15/93							
LR 58-57-311	08/18/93							

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L	Dieldrin Total ug/L
TD 68-42-806	09/20/93	<0.1	<0.10	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
TD 69-46-601	08/02/93	<0.1	<0.10	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
TD 69-47-303	08/03/93	<0.1	<0.10	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010
TD 68-41-303	08/02/93	<0.1	<0.10	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Endo-sulfan, Total ug/L	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L	Para-thion, Total ug/L
TD 68-42-806	09/20/93	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.1	<0.01	<0.01
TD 69-46-601	08/02/93	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.1	<0.01	<0.01
TD 69-47-303	08/03/93	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.1	<0.01	<0.01
TD 68-41-303	08/02/93	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.1	<0.01	<0.01

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Di-azinon, Total ug/L	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
TD 68-42-806	09/20/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD 69-46-601	08/02/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD 69-47-303	08/03/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD 68-41-303	08/02/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Per-thane Total ug/L	Naptha-lenes, Poly-chlor. Total ug/L	Aldrin, Total ug/L	Lindane, Total ug/L	Chlor-dane, Total ug/L	DDD, Total ug/L	DDT, Total ug/L	Dieldrin Total ug/L	Endo-sulfan, Total ug/L
YP 69-50-501	09/02/93									
YP 69-50-506	09/29/93									
YP 69-51-102	08/03/93	<0.1	<0.10	<0.10	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
YP 69-50-207	09/29/93									
YP 69-50-203	09/29/93									
YP 69-51-114	08/03/93									
YP 69-43-603	09/02/93	<0.1	<0.10	<0.10	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
YP 69-45-404	09/02/93	<0.1	<0.10	<0.10	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01
YP 69-45-405	08/03/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Endrin Water Unfltrd Rec ug/L	Ethion, Total ug/L	Tox-aphene, Total ug/L	Hepta-chlor, Total ug/L	Hepta-chlor Epoxide Toatl ug/L	PCB, Total ug/L	Mala-thion, Total ug/L	Para-thion, Total ug/L	Di-azinon, Total ug/L
YP 69-50-501	09/02/93									
YP 69-50-506	09/29/93									
YP 69-51-102	08/03/93	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
YP 69-50-207	09/29/93									
YP 69-50-203	09/29/93									
YP 69-51-114	08/03/93									
YP 69-43-603	09/02/93	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
YP 69-45-404	09/02/93	<0.01	<0.01	<1	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01
YP 69-45-405	08/03/93									

Data for pesticides in water from Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Methyl Para-thion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L	Mirex, Total ug/L	Silvex, Total ug/L	Total Tri-thion ug/L
YP 69-50-501	09/02/93						
YP 69-50-506	09/29/93						
YP 69-51-102	08/03/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
YP 69-50-207	09/29/93						
YP 69-50-203	09/29/93						
YP 69-51-114	08/03/93						
YP 69-43-603	09/02/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
YP 69-45-404	09/02/93	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
YP 69-45-405	08/03/93						

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L
AY 68-37-705	09/28/93								
AY 68-37-521	01/27/93								
AY 68-37-521	02/19/93								
AY 68-37-521	02/19/93								
AY 68-37-521	04/01/93								
AY 68-37-521	04/26/93								
AY 68-37-521	05/04/93								
AY 68-37-521	06/30/93								
AY 68-37-521	07/28/93								
AY 68-37-521	09/08/93								
AY 68-37-521	09/27/93								
AY 68-37-521	11/30/93								
AY 68-37-521	12/29/93								
AY 68-37-522	01/27/93								
AY 68-37-522	02/19/93								
AY 68-37-522	02/19/93								
AY 68-37-522	04/01/93								
AY 68-37-522	04/26/93								
AY 68-37-522	05/04/93								
AY 68-37-522	06/30/93								
AY 68-37-522	07/28/93								
AY 68-37-522	09/08/93								
AY 68-37-522	09/27/93								
AY 68-37-522	11/30/93								
AY 68-37-522	12/29/93								
AY 68-37-523	01/27/93								
AY 68-37-523	02/19/93								
AY 68-37-523	02/19/93								
AY 68-37-523	04/01/93								
AY 68-37-523	04/26/93								
AY 68-37-523	05/04/93								
AY 68-37-523	06/30/93								
AY 68-37-523	07/28/93								
AY 68-37-523	09/08/93								
AY 68-37-523	09/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Chloro-benzene Total ug/L	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L
AY 68-37-705	09/28/93									
AY 68-37-521	01/27/93									
AY 68-37-521	02/19/93									
AY 68-37-521	02/19/93									
AY 68-37-521	04/01/93									
AY 68-37-521	04/26/93									
AY 68-37-521	05/04/93									
AY 68-37-521	06/30/93									
AY 68-37-521	07/28/93									
AY 68-37-521	09/08/93									
AY 68-37-521	09/27/93									
AY 68-37-521	11/30/93									
AY 68-37-521	12/29/93									
AY 68-37-522	01/27/93									
AY 68-37-522	02/19/93									
AY 68-37-522	02/19/93									
AY 68-37-522	04/01/93									
AY 68-37-522	04/26/93									
AY 68-37-522	05/04/93									
AY 68-37-522	06/30/93									
AY 68-37-522	07/28/93									
AY 68-37-522	09/08/93									
AY 68-37-522	09/27/93									
AY 68-37-522	11/30/93									
AY 68-37-522	12/29/93									
AY 68-37-523	01/27/93									
AY 68-37-523	02/19/93									
AY 68-37-523	02/19/93									
AY 68-37-523	04/01/93									
AY 68-37-523	04/26/93									
AY 68-37-523	05/04/93									
AY 68-37-523	06/30/93									
AY 68-37-523	07/28/93									
AY 68-37-523	09/08/93									
AY 68-37-523	09/27/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	1,1,1-Tri-chloro-ethane Total ug/L	1,1,2-Tri-chloro-ethane Total ug/L	Ethane, 1,1,2,2 Tetrachlo-ro Wat Unf Rec ug/L	1,2-Di-chloro-propane Total ug/L	1,2-Transdi-chloro-ethene Total ug/L	1,3-Di-chloro-propene Total ug/L	2-Chloro-ethyl-vinyl-ether Total ug/L	Dichloro-difluoro-methane Total ug/L
AY 68-37-705	09/28/93								
AY 68-37-521	01/27/93								
AY 68-37-521	02/19/93								
AY 68-37-521	02/19/93								
AY 68-37-521	04/01/93								
AY 68-37-521	04/26/93								
AY 68-37-521	05/04/93								
AY 68-37-521	06/30/93								
AY 68-37-521	07/28/93								
AY 68-37-521	09/08/93								
AY 68-37-521	09/27/93								
AY 68-37-521	11/30/93								
AY 68-37-521	12/29/93								
AY 68-37-522	01/27/93								
AY 68-37-522	02/19/93								
AY 68-37-522	02/19/93								
AY 68-37-522	04/01/93								
AY 68-37-522	04/26/93								
AY 68-37-522	05/04/93								
AY 68-37-522	06/30/93								
AY 68-37-522	07/28/93								
AY 68-37-522	09/08/93								
AY 68-37-522	09/27/93								
AY 68-37-522	11/30/93								
AY 68-37-522	12/29/93								
AY 68-37-523	01/27/93								
AY 68-37-523	02/19/93								
AY 68-37-523	02/19/93								
AY 68-37-523	04/01/93								
AY 68-37-523	04/26/93								
AY 68-37-523	05/04/93								
AY 68-37-523	06/30/93								
AY 68-37-523	07/28/93								
AY 68-37-523	09/08/93								
AY 68-37-523	09/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L	Methylchloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Dichloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Dichloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Dichloropropene Total ug/L	Styrene Total ug/L
AY 68-37-705	09/28/93								
AY 68-37-521	01/27/93								
AY 68-37-521	02/19/93								
AY 68-37-521	02/19/93								
AY 68-37-521	04/01/93								
AY 68-37-521	04/26/93								
AY 68-37-521	05/04/93								
AY 68-37-521	06/30/93								
AY 68-37-521	07/28/93								
AY 68-37-521	09/08/93								
AY 68-37-521	09/27/93								
AY 68-37-521	11/30/93								
AY 68-37-521	12/29/93								
AY 68-37-522	01/27/93								
AY 68-37-522	02/19/93								
AY 68-37-522	02/19/93								
AY 68-37-522	04/01/93								
AY 68-37-522	04/26/93								
AY 68-37-522	05/04/93								
AY 68-37-522	06/30/93								
AY 68-37-522	07/28/93								
AY 68-37-522	09/08/93								
AY 68-37-522	09/27/93								
AY 68-37-522	11/30/93								
AY 68-37-522	12/29/93								
AY 68-37-523	01/27/93								
AY 68-37-523	02/19/93								
AY 68-37-523	02/19/93								
AY 68-37-523	04/01/93								
AY 68-37-523	04/26/93								
AY 68-37-523	05/04/93								
AY 68-37-523	06/30/93								
AY 68-37-523	07/28/93								
AY 68-37-523	09/08/93								
AY 68-37-523	09/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Xylene Water Unfiltrd Rec ug/L
AY 68-37-705	09/28/93	
AY 68-37-521	01/27/93	
AY 68-37-521	02/19/93	
AY 68-37-521	02/19/93	
AY 68-37-521	04/01/93	
AY 68-37-521	04/26/93	
AY 68-37-521	05/04/93	
AY 68-37-521	06/30/93	
AY 68-37-521	07/28/93	
AY 68-37-521	09/08/93	
AY 68-37-521	09/27/93	
AY 68-37-521	11/30/93	
AY 68-37-521	12/29/93	
AY 68-37-522	01/27/93	
AY 68-37-522	02/19/93	
AY 68-37-522	02/19/93	
AY 68-37-522	04/01/93	
AY 68-37-522	04/26/93	
AY 68-37-522	05/04/93	
AY 68-37-522	06/30/93	
AY 68-37-522	07/28/93	
AY 68-37-522	09/08/93	
AY 68-37-522	09/27/93	
AY 68-37-522	11/30/93	
AY 68-37-522	12/29/93	
AY 68-37-523	01/27/93	
AY 68-37-523	02/19/93	
AY 68-37-523	02/19/93	
AY 68-37-523	04/01/93	
AY 68-37-523	04/26/93	
AY 68-37-523	05/04/93	
AY 68-37-523	06/30/93	
AY 68-37-523	07/28/93	
AY 68-37-523	09/08/93	
AY 68-37-523	09/27/93	

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L
AY 68-37-523	11/30/93								
AY 68-37-523	12/29/93								
AY 68-37-404	09/28/93								
AY 68-37-524	01/12/93								
AY 68-37-524	02/19/93								
AY 68-37-524	02/19/93								
AY 68-37-524	04/08/93								
AY 68-37-524	04/26/93								
AY 68-37-524	05/03/93								
AY 68-37-524	06/30/93								
AY 68-37-524	07/27/93								
AY 68-37-524	09/07/93								
AY 68-37-524	09/27/93								
AY 68-37-524	11/30/93								
AY 68-37-524	12/29/93								
AY 68-37-525	01/12/93								
AY 68-37-525	02/19/93								
AY 68-37-525	02/19/93								
AY 68-37-525	04/08/93								
AY 68-37-525	04/26/93								
AY 68-37-525	05/03/93								
AY 68-37-525	06/30/93								
AY 68-37-525	07/27/93								
AY 68-37-525	09/07/93								
AY 68-37-525	09/27/93								
AY 68-37-525	11/30/93								
AY 68-37-525	12/29/93								
AY 68-37-526	01/12/93								
AY 68-37-526	02/19/93								
AY 68-37-526	02/19/93								
AY 68-37-526	04/01/93								
AY 68-37-526	04/21/93								
AY 68-37-526	05/04/93								
AY 68-37-526	06/30/93								
AY 68-37-526	07/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Chloro-benzene Total ug/L	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L
AY 68-37-523	11/30/93									
AY 68-37-523	12/29/93									
AY 68-37-404	09/28/93									
AY 68-37-524	01/12/93									
AY 68-37-524	02/19/93									
AY 68-37-524	02/19/93									
AY 68-37-524	04/08/93									
AY 68-37-524	04/26/93									
AY 68-37-524	05/03/93									
AY 68-37-524	06/30/93									
AY 68-37-524	07/27/93									
AY 68-37-524	09/07/93									
AY 68-37-524	09/27/93									
AY 68-37-524	11/30/93									
AY 68-37-524	12/29/93									
AY 68-37-525	01/12/93									
AY 68-37-525	02/19/93									
AY 68-37-525	02/19/93									
AY 68-37-525	04/08/93									
AY 68-37-525	04/26/93									
AY 68-37-525	05/03/93									
AY 68-37-525	06/30/93									
AY 68-37-525	07/27/93									
AY 68-37-525	09/07/93									
AY 68-37-525	09/27/93									
AY 68-37-525	11/30/93									
AY 68-37-525	12/29/93									
AY 68-37-526	01/12/93									
AY 68-37-526	02/19/93									
AY 68-37-526	02/19/93									
AY 68-37-526	04/01/93									
AY 68-37-526	04/21/93									
AY 68-37-526	05/04/93									
AY 68-37-526	06/30/93									
AY 68-37-526	07/27/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	1,1,1-Trichloroethane Total ug/L	1,1,2-Trichloroethane Total ug/L	Ethane, 1,1,2,2 Tetrachloro Wat Unf Rec ug/L	1,2-Dichloropropane Total ug/L	1,2-Transdichloroethene Total ug/L	1,3-Dichloropropene Total ug/L	2-Chloroethylvinylether Total ug/L	Dichlorodifluoromethane Total ug/L
AY 68-37-523	11/30/93								
AY 68-37-523	12/29/93								
AY 68-37-404	09/28/93								
AY 68-37-524	01/12/93								
AY 68-37-524	02/19/93								
AY 68-37-524	02/19/93								
AY 68-37-524	04/08/93								
AY 68-37-524	04/26/93								
AY 68-37-524	05/03/93								
AY 68-37-524	06/30/93								
AY 68-37-524	07/27/93								
AY 68-37-524	09/07/93								
AY 68-37-524	09/27/93								
AY 68-37-524	11/30/93								
AY 68-37-524	12/29/93								
AY 68-37-525	01/12/93								
AY 68-37-525	02/19/93								
AY 68-37-525	02/19/93								
AY 68-37-525	04/08/93								
AY 68-37-525	04/26/93								
AY 68-37-525	05/03/93								
AY 68-37-525	06/30/93								
AY 68-37-525	07/27/93								
AY 68-37-525	09/07/93								
AY 68-37-525	09/27/93								
AY 68-37-525	11/30/93								
AY 68-37-525	12/29/93								
AY 68-37-526	01/12/93								
AY 68-37-526	02/19/93								
AY 68-37-526	02/19/93								
AY 68-37-526	04/01/93								
AY 68-37-526	04/21/93								
AY 68-37-526	05/04/93								
AY 68-37-526	06/30/93								
AY 68-37-526	07/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L	Methylchloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Dichloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Dichloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Dichloropropene Total ug/L	Styrene Total ug/L
AY 68-37-523	11/30/93								
AY 68-37-523	12/29/93								
AY 68-37-404	09/28/93								
AY 68-37-524	01/12/93								
AY 68-37-524	02/19/93								
AY 68-37-524	02/19/93								
AY 68-37-524	04/08/93								
AY 68-37-524	04/26/93								
AY 68-37-524	05/03/93								
AY 68-37-524	06/30/93								
AY 68-37-524	07/27/93								
AY 68-37-524	09/07/93								
AY 68-37-524	09/27/93								
AY 68-37-524	11/30/93								
AY 68-37-524	12/29/93								
AY 68-37-525	01/12/93								
AY 68-37-525	02/19/93								
AY 68-37-525	02/19/93								
AY 68-37-525	04/08/93								
AY 68-37-525	04/26/93								
AY 68-37-525	05/03/93								
AY 68-37-525	06/30/93								
AY 68-37-525	07/27/93								
AY 68-37-525	09/07/93								
AY 68-37-525	09/27/93								
AY 68-37-525	11/30/93								
AY 68-37-525	12/29/93								
AY 68-37-526	01/12/93								
AY 68-37-526	02/19/93								
AY 68-37-526	02/19/93								
AY 68-37-526	04/01/93								
AY 68-37-526	04/21/93								
AY 68-37-526	05/04/93								
AY 68-37-526	06/30/93								
AY 68-37-526	07/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Xylene Water Unfiltrd Rec ug/L
AY 68-37-523	11/30/93	
AY 68-37-523	12/29/93	
AY 68-37-404	09/28/93	
AY 68-37-524	01/12/93	
AY 68-37-524	02/19/93	
AY 68-37-524	02/19/93	
AY 68-37-524	04/08/93	
AY 68-37-524	04/26/93	
AY 68-37-524	05/03/93	
AY 68-37-524	06/30/93	
AY 68-37-524	07/27/93	
AY 68-37-524	09/07/93	
AY 68-37-524	09/27/93	
AY 68-37-524	11/30/93	
AY 68-37-524	12/29/93	
AY 68-37-525	01/12/93	
AY 68-37-525	02/19/93	
AY 68-37-525	02/19/93	
AY 68-37-525	04/08/93	
AY 68-37-525	04/26/93	
AY 68-37-525	05/03/93	
AY 68-37-525	06/30/93	
AY 68-37-525	07/27/93	
AY 68-37-525	09/07/93	
AY 68-37-525	09/27/93	
AY 68-37-525	11/30/93	
AY 68-37-525	12/29/93	
AY 68-37-526	01/12/93	
AY 68-37-526	02/19/93	
AY 68-37-526	02/19/93	
AY 68-37-526	04/01/93	
AY 68-37-526	04/21/93	
AY 68-37-526	05/04/93	
AY 68-37-526	06/30/93	
AY 68-37-526	07/27/93	

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L
AY 68-37-526	09/08/93								
AY 68-37-526	09/16/93								
AY 68-37-526	11/30/93								
AY 68-37-526	12/29/93								
AY 68-37-527	01/12/93								
AY 68-37-527	02/17/93								
AY 68-37-527	02/17/93								
AY 68-37-527	04/01/93								
AY 68-37-527	04/21/93								
AY 68-37-527	05/04/93								
AY 68-37-527	06/30/93								
AY 68-37-527	07/27/93								
AY 68-37-527	09/08/93								
AY 68-37-527	09/16/93								
AY 68-37-527	11/30/93								
AY 68-37-527	12/29/93								
AY 68-36-102	09/28/93								
AY 68-28-913	09/29/93								
AY 68-28-905	09/29/93								
AY 68-29-702	09/28/93								
AY 68-28-904	09/29/93								
AY 68-28-919	09/29/93								
AY 68-28-508	09/27/93								
AY 68-29-401	09/27/93								
AY 68-29-410	09/27/93								
AY 68-28-501	04/06/93								
AY 68-28-205	04/06/93								
AY 68-28-205	04/09/93								
AY 68-29-109	09/27/93								
AY 68-28-203	04/06/93								
AY 68-27-303	09/22/93	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
AY 68-29-303	09/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Chloro-benzene Total ug/L	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L
AY 68-37-526	09/08/93									
AY 68-37-526	09/16/93									
AY 68-37-526	11/30/93									
AY 68-37-526	12/29/93									
AY 68-37-527	01/12/93									
AY 68-37-527	02/17/93									
AY 68-37-527	02/17/93									
AY 68-37-527	04/01/93									
AY 68-37-527	04/21/93									
AY 68-37-527	05/04/93									
AY 68-37-527	06/30/93									
AY 68-37-527	07/27/93									
AY 68-37-527	09/08/93									
AY 68-37-527	09/16/93									
AY 68-37-527	11/30/93									
AY 68-37-527	12/29/93									
AY 68-36-102	09/28/93									
AY 68-28-913	09/29/93									
AY 68-28-905	09/29/93									
AY 68-29-702	09/28/93									
AY 68-28-904	09/29/93									
AY 68-28-919	09/29/93									
AY 68-28-508	09/27/93									
AY 68-29-401	09/27/93									
AY 68-29-410	09/27/93									
AY 68-28-501	04/06/93									
AY 68-28-205	04/06/93									
AY 68-28-205	04/09/93									
AY 68-29-109	09/27/93									
AY 68-28-203	04/06/93									
AY 68-27-303	09/22/93	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
AY 68-29-303	09/27/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	1,1,1-Tri-chloro-ethane Total ug/L	1,1,2-Tri-chloro-ethane Total ug/L	Ethane, 1,1,2,2 Tetrachlo-ro Wat Unf Rec ug/L	1,2-Di-chloro-propane Total ug/L	1,2-Transdi-chloro-ethene Total ug/L	1,3-Di-chloro-propene Total ug/L	2-Chloro-ethyl-vinyl-ether Total ug/L	Dichloro-difluoro-methane Total ug/L
AY 68-37-526	09/08/93								
AY 68-37-526	09/16/93								
AY 68-37-526	11/30/93								
AY 68-37-526	12/29/93								
AY 68-37-527	01/12/93								
AY 68-37-527	02/17/93								
AY 68-37-527	02/17/93								
AY 68-37-527	04/01/93								
AY 68-37-527	04/21/93								
AY 68-37-527	05/04/93								
AY 68-37-527	06/30/93								
AY 68-37-527	07/27/93								
AY 68-37-527	09/08/93								
AY 68-37-527	09/16/93								
AY 68-37-527	11/30/93								
AY 68-37-527	12/29/93								
AY 68-36-102	09/28/93								
AY 68-28-913	09/29/93								
AY 68-28-905	09/29/93								
AY 68-29-702	09/28/93								
AY 68-28-904	09/29/93								
AY 68-28-919	09/29/93								
AY 68-28-508	09/27/93								
AY 68-29-401	09/27/93								
AY 68-29-410	09/27/93								
AY 68-28-501	04/06/93								
AY 68-28-205	04/06/93								
AY 68-28-205	04/09/93								
AY 68-29-109	09/27/93								
AY 68-28-203	04/06/93								
AY 68-27-303	09/22/93	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2
AY 68-29-303	09/27/93								

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L	Methylchloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Dichloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Dichloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Dichloropropene Total ug/L	Styrene Total ug/L
AY 68-37-526	09/08/93								
AY 68-37-526	09/16/93								
AY 68-37-526	11/30/93								
AY 68-37-526	12/29/93								
AY 68-37-527	01/12/93								
AY 68-37-527	02/17/93								
AY 68-37-527	02/17/93								
AY 68-37-527	04/01/93								
AY 68-37-527	04/21/93								
AY 68-37-527	05/04/93								
AY 68-37-527	06/30/93								
AY 68-37-527	07/27/93								
AY 68-37-527	09/08/93								
AY 68-37-527	09/16/93								
AY 68-37-527	11/30/93								
AY 68-37-527	12/29/93								
AY 68-36-102	09/28/93								
AY 68-28-913	09/29/93								
AY 68-28-905	09/29/93								
AY 68-29-702	09/28/93								
AY 68-28-904	09/29/93								
AY 68-28-919	09/29/93								
AY 68-28-508	09/27/93								
AY 68-29-401	09/27/93								
AY 68-29-410	09/27/93								
AY 68-28-501	04/06/93								
AY 68-28-205	04/06/93								
AY 68-28-205	04/09/93								
AY 68-29-109	09/27/93								
AY 68-28-203	04/06/93								
AY 68-27-303	09/22/93	<.2	<.2	<.2	<.2	<.2	<.2	<.2	
AY 68-29-303	09/27/93								<.2

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Bexar County

State Well ID Number	Date	Xylene Water Unfiltrd Rec ug/L
AY 68-37-526	09/08/93	
AY 68-37-526	09/16/93	
AY 68-37-526	11/30/93	
AY 68-37-526	12/29/93	
AY 68-37-527	01/12/93	
AY 68-37-527	02/17/93	
AY 68-37-527	02/17/93	
AY 68-37-527	04/01/93	
AY 68-37-527	04/21/93	
AY 68-37-527	05/04/93	
AY 68-37-527	06/30/93	
AY 68-37-527	07/27/93	
AY 68-37-527	09/08/93	
AY 68-37-527	09/16/93	
AY 68-37-527	11/30/93	
AY 68-37-527	12/29/93	
AY 68-36-102	09/28/93	
AY 68-28-913	09/29/93	
AY 68-28-905	09/29/93	
AY 68-29-702	09/28/93	
AY 68-28-904	09/29/93	
AY 68-28-919	09/29/93	
AY 68-28-508	09/27/93	
AY 68-29-401	09/27/93	
AY 68-29-410	09/27/93	
AY 68-28-501	04/06/93	
AY 68-28-205	04/06/93	
AY 68-28-205	04/09/93	
AY 68-29-109	09/27/93	
AY 68-28-203	04/06/93	
AY 68-27-303	09/22/93	
AY 68-29-303	09/27/93	<.2

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L	Chloro-benzene Total ug/L
DX 68-22-902	08/24/93									
DX 68-22-901	08/24/93									
DX 68-23-602	08/23/93									
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L	1,1,1-Tri-chloro-ethane Total ug/L
DX 68-22-902	08/24/93									
DX 68-22-901	08/24/93									
DX 68-23-602	08/23/93									
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	1,1,2-Trichloroethane Total ug/L	Ethane, 1,1,2,2 Tetrachloro Wat Unf Rec ug/L	1,2-Dichloropropane Total ug/L	1,2-Transdichloroethene Total ug/L	1,3-Dichloropropene Total ug/L	2-Chloroethylvinylether Total ug/L	Dichlorodifluoromethane Total ug/L	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L
DX 68-22-902	08/24/93									
DX 68-22-901	08/24/93									
DX 68-23-602	08/23/93									
DX 68-23-616A	01/13/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	02/16/93									
DX 68-23-616A	03/31/93									
DX 68-23-616A	04/27/93									
DX 68-23-616A	07/30/93									
DX 68-23-616A	09/09/93									
DX 68-23-616A	09/29/93									
DX 68-23-616A	11/29/93									
DX 68-23-616A	12/15/93									
DX 68-23-616B	01/13/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	02/16/93									
DX 68-23-616B	03/31/93									
DX 68-23-616B	04/27/93									
DX 68-23-616B	07/30/93									
DX 68-23-616B	09/09/93									
DX 68-23-616B	09/29/93									
DX 68-23-616B	11/29/93									
DX 68-23-616B	12/15/93									
DX 68-23-617	01/14/93									
DX 68-23-617	02/18/93									
DX 68-23-617	02/18/93									
DX 68-23-617	03/31/93									
DX 68-23-617	04/27/93									
DX 68-23-617	06/29/93									
DX 68-23-617	07/30/93									
DX 68-23-617	09/09/93									
DX 68-23-617	09/28/93									
DX 68-23-617	11/29/93									
DX 68-23-617	12/15/93									
DX 68-23-618	01/14/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Methyl-chloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Di-chloro-Wtr Unfiltrd Rec ug/L	Benzene 1,4-Di-chloro-Wtr Unfiltrd Rec ug/L	Cis 1,3-Di-chloro-propene Total ug/L	Styrene Total ug/L	Xylene Water Unfiltrd Rec ug/L
DX 68-22-902	08/24/93							
DX 68-22-901	08/24/93							
DX 68-23-602	08/23/93							
DX 68-23-616A	01/13/93							
DX 68-23-616A	02/16/93							
DX 68-23-616A	02/16/93							
DX 68-23-616A	03/31/93							
DX 68-23-616A	04/27/93							
DX 68-23-616A	07/30/93							
DX 68-23-616A	09/09/93							
DX 68-23-616A	09/29/93							
DX 68-23-616A	11/29/93							
DX 68-23-616A	12/15/93							
DX 68-23-616B	01/13/93							
DX 68-23-616B	02/16/93							
DX 68-23-616B	02/16/93							
DX 68-23-616B	03/31/93							
DX 68-23-616B	04/27/93							
DX 68-23-616B	07/30/93							
DX 68-23-616B	09/09/93							
DX 68-23-616B	09/29/93							
DX 68-23-616B	11/29/93							
DX 68-23-616B	12/15/93							
DX 68-23-617	01/14/93							
DX 68-23-617	02/18/93							
DX 68-23-617	02/18/93							
DX 68-23-617	03/31/93							
DX 68-23-617	04/27/93							
DX 68-23-617	06/29/93							
DX 68-23-617	07/30/93							
DX 68-23-617	09/09/93							
DX 68-23-617	09/28/93							
DX 68-23-617	11/29/93							
DX 68-23-617	12/15/93							
DX 68-23-618	01/14/93							

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L	Chloro-benzene Total ug/L
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93									
DX 68-23-316	09/23/93									
DX 68-23-305	08/23/93									
DX 68-15-901	09/23/93									
DX 68-16-502	08/26/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L	1,1,1-Tri-chloro-ethane Total ug/L
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93									
DX 68-23-316	09/23/93									
DX 68-23-305	08/23/93									
DX 68-15-901	09/23/93									
DX 68-16-502	08/26/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	1,1,2-Trichloroethane Total ug/L	Ethane, 1,1,2,2 Tetrachloro Wat Unf Rec ug/L	1,2-Dichloropropane Total ug/L	1,2-Transdichloroethene Total ug/L	1,3-Dichloropropene Total ug/L	2-Chloroethylvinylether Total ug/L	Dichlorodifluoromethane Total ug/L	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L
DX 68-23-618	02/18/93									
DX 68-23-618	02/18/93									
DX 68-23-618	03/31/93									
DX 68-23-618	04/27/93									
DX 68-23-618	06/29/93									
DX 68-23-618	07/30/93									
DX 68-23-618	09/09/93									
DX 68-23-618	09/28/93									
DX 68-23-618	11/29/93									
DX 68-23-618	12/15/93									
DX 68-23-619A	01/13/93									
DX 68-23-619A	04/05/93									
DX 68-23-619A	04/27/93									
DX 68-23-619A	06/29/93									
DX 68-23-619A	07/29/93									
DX 68-23-619A	09/09/93									
DX 68-23-619A	09/28/93									
DX 68-23-619A	11/29/93									
DX 68-23-619A	12/15/93									
DX 68-23-619B	01/13/93									
DX 68-23-619B	04/05/93									
DX 68-23-619B	04/27/93									
DX 68-23-619B	06/29/93									
DX 68-23-619B	07/29/93									
DX 68-23-619B	09/09/93									
DX 68-23-619B	09/28/93									
DX 68-23-619B	11/29/93									
DX 68-23-619B	12/15/93									
DX 68-23-301	08/20/93									
DX 68-23-316	09/23/93									
DX 68-23-305	08/23/93									
DX 68-15-901	09/23/93									
DX 68-16-502	08/26/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Comal County

State Well ID Number	Date	Methyl-chloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Di-chloro-Wtr Unfiltrd Rec ug/L	Benzene 1,4-Di-chloro-Wtr Unfiltrd Rec ug/L	Cis 1,3-Di-chloro-propene Total ug/L	Styrene Total ug/L	Xylene Water Unfiltrd Rec ug/L
DX 68-23-618	02/18/93							
DX 68-23-618	02/18/93							
DX 68-23-618	03/31/93							
DX 68-23-618	04/27/93							
DX 68-23-618	06/29/93							
DX 68-23-618	07/30/93							
DX 68-23-618	09/09/93							
DX 68-23-618	09/28/93							
DX 68-23-618	11/29/93							
DX 68-23-618	12/15/93							
DX 68-23-619A	01/13/93							
DX 68-23-619A	04/05/93							
DX 68-23-619A	04/27/93							
DX 68-23-619A	06/29/93							
DX 68-23-619A	07/29/93							
DX 68-23-619A	09/09/93							
DX 68-23-619A	09/28/93							
DX 68-23-619A	11/29/93							
DX 68-23-619A	12/15/93							
DX 68-23-619B	01/13/93							
DX 68-23-619B	04/05/93							
DX 68-23-619B	04/27/93							
DX 68-23-619B	06/29/93							
DX 68-23-619B	07/29/93							
DX 68-23-619B	09/09/93							
DX 68-23-619B	09/28/93							
DX 68-23-619B	11/29/93							
DX 68-23-619B	12/15/93							
DX 68-23-301	08/20/93							
DX 68-23-316	09/23/93							
DX 68-23-305	08/23/93							
DX 68-15-901	09/23/93							
DX 68-16-502	08/26/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L	Chloro-benzene Total ug/L
LR 67-09-111	08/26/93									
LR 67-01-802	08/30/93									
LR 67-01-806	08/30/93									
LR 67-01-801	08/31/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-302	08/30/93	0.7	<0.2	<0.2	0.2	0.5	2.1	<0.2	<0.2	<0.2
LR 67-01-308	07/29/93									
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-58-403	08/19/93									
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L	1,1,1-Tri-chloro-ethane Total ug/L
LR 67-09-111	08/26/93									
LR 67-01-802	08/30/93									
LR 67-01-806	08/30/93									
LR 67-01-801	08/31/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-302	08/30/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-308	07/29/93									
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-58-403	08/19/93									
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	1,1,2-Tri-chloro-ethane Total ug/L	Ethane, 1,1,2,2 Tetrachlo-ro Wat Unf Rec ug/L	1,2-Di-chloro-propane Total ug/L	1,2-Transdi-chloro-ethene Total ug/L	1,3-Di-chloro-propene Total ug/L	2-Chloro-ethyl-vinyl-ether Total ug/L	Dichloro-difluoro-methane Total ug/L	Vinyl Chlo-ride Total ug/L	Tri-chloro-ethyl-ene Total ug/L
LR 67-09-111	08/26/93									
LR 67-01-802	08/30/93									
LR 67-01-806	08/30/93									
LR 67-01-801	08/31/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-302	08/30/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-308	07/29/93									
LR 67-01-812	12/13/93									
LR 67-01-813A	12/07/93									
LR 67-01-813B	12/07/93									
LR 67-01-814A	12/07/93									
LR 67-01-814B	12/07/93									
LR 58-58-403	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-58-403	08/19/93									
LR 58-58-403	08/20/93									
LR 58-57-311	01/22/93									
LR 58-57-311	01/25/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/08/93									
LR 58-57-311	05/11/93	<3	<3	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/15/93									
LR 58-57-311	08/18/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Hays County

State Well ID Number	Date	Methyl-chloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Di-chloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Di-chloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Di-chloro-propene Total ug/L	Styrene Total ug/L	Xylene Water Unfiltrd Rec ug/L
LR 67-09-111	08/26/93							
LR 67-01-802	08/30/93							
LR 67-01-806	08/30/93							
LR 67-01-801	08/31/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-302	08/30/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR 67-01-308	07/29/93							
LR 67-01-812	12/13/93							
LR 67-01-813A	12/07/93							
LR 67-01-813B	12/07/93							
LR 67-01-814A	12/07/93							
LR 67-01-814B	12/07/93							
LR 58-58-403	05/11/93	<3	<3	<3	<3	<3	<3	<3
LR 58-58-403	08/19/93							
LR 58-58-403	08/20/93							
LR 58-57-311	01/22/93							
LR 58-57-311	01/25/93	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/08/93							
LR 58-57-311	05/11/93	<3	<3	<3	<3	<3	<3	<3
LR 58-57-311	05/15/93							
LR 58-57-311	08/18/93							

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L	Chloro-benzene Total ug/L
TD 68-42-806	09/20/93									
TD 69-46-601	08/02/93									
TD 69-47-303	08/03/93									
TD 68-41-303	08/02/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L	1,1,1-Tri-chloro-ethane Total ug/L
TD 68-42-806	09/20/93									
TD 69-46-601	08/02/93									
TD 69-47-303	08/03/93									
TD 68-41-303	08/02/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	1,1,2-Trichloroethane Total ug/L	Ethane, 1,1,2,2 Tetrachloro Wat Unf Rec ug/L	1,2-Dichloropropane Total ug/L	1,2-Transdichloroethene Total ug/L	1,3-Dichloropropene Total ug/L	2-Chloroethylvinylether Total ug/L	Dichlorodifluoromethane Total ug/L	Vinyl Chloride Total ug/L	Trichloroethylene Total ug/L
TD 68-42-806	09/20/93									
TD 69-46-601	08/02/93									
TD 69-47-303	08/03/93									
TD 68-41-303	08/02/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Medina County

State Well ID Number	Date	Methyl-chloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Di-chloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Di-chloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Di-chloro-propene Total ug/L	Styrene Total ug/L	Xylene Water Unfiltrd Rec ug/L
TD 68-42-806	09/20/93							
TD 69-46-601	08/02/93							
TD 69-47-303	08/03/93							
TD 68-41-303	08/02/93							

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Di-chloro-bromo-methane Total ug/L	Carbon-tetra-chlo-ride Total ug/L	1,2-Di-chloro-ethane Total ug/L	Bromo-form Total ug/L	Chloro-Di-bromo-methane Total ug/L	Chloro-form Total ug/L	Toluene Total ug/L	Benzene Total ug/L	Chloro-benzene Total ug/L
YP 69-50-501	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
YP 69-50-506	09/29/93									
YP 69-51-102	08/03/93									
YP 69-50-207	09/29/93									
YP 69-50-203	09/29/93									
YP 69-51-114	08/03/93									
YP 69-43-603	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
YP 69-45-404	09/02/93									
YP 69-45-405	08/03/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Chloro-ethane Total ug/L	Ethyl-benzene Total ug/L	Methyl-bromide Total ug/L	Methyl-ene Chlo-ride Total ug/L	Tetra-chloro-ethyl-ene Total ug/L	Tri-chloro-fluoro-methane Total ug/L	1,1-Di-chloro-ethane Total ug/L	1,1-Di-chloro-ethyl-ene Total ug/L	1,1,1-Tri-chloro-ethane Total ug/L
YP 69-50-501	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
YP 69-50-506	09/29/93									
YP 69-51-102	08/03/93									
YP 69-50-207	09/29/93									
YP 69-50-203	09/29/93									
YP 69-51-114	08/03/93									
YP 69-43-603	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
YP 69-45-404	09/02/93									
YP 69-45-405	08/03/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs
sampled in 1993 by United States Geological Survey and
Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	1,1,2-Tri-chloro-ethane Total ug/L	Ethane, 1,1,2,2 Tetrachlo-ro Wat Unf Rec ug/L	1,2-Di-chloro-propane Total ug/L	1,2-Trans-di-chloro-ethene Total ug/L	1,3-Di-chloro-propene Total ug/L	2-Chloro-ethyl-vinyl-ether Total ug/L	Dichloro-difluoro-methane Total ug/L	Vinyl Chlo-ride Total ug/L	Tri-chloro-ethyl-ene Total ug/L
YP 69-50-501	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
YP 69-50-506	09/29/93									
YP 69-51-102	08/03/93									
YP 69-50-207	09/29/93									
YP 69-50-203	09/29/93									
YP 69-51-114	08/03/93									
YP 69-43-603	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
YP 69-45-404	09/02/93									
YP 69-45-405	08/03/93									

Data for volatile organic compounds in Edwards Aquifer wells and springs sampled in 1993 by United States Geological Survey and Edwards Underground Water District, Field Operations Division

Uvalde County

State Well ID Number	Date	Methyl-chloride Total ug/L	Benzene 0-Chloro-Water Unfiltered Rec ug/L	Benzene 1,3-Di-chloro-Wtr Unfltrd Rec ug/L	Benzene 1,4-Di-chloro-Wtr Unfltrd Rec ug/L	Cis 1,3-Di-chloro-propene Total ug/L	Styrene Total ug/L	Xylene Water Unfiltrd Rec ug/L
YP 69-50-501	09/02/93	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
YP 69-50-506	09/29/93							
YP 69-51-102	08/03/93							
YP 69-50-207	09/29/93							
YP 69-50-203	09/29/93							
YP 69-51-114	08/03/93							
YP 69-43-603	09/02/93	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
YP 69-45-404	09/02/93							
YP 69-45-405	08/03/93							