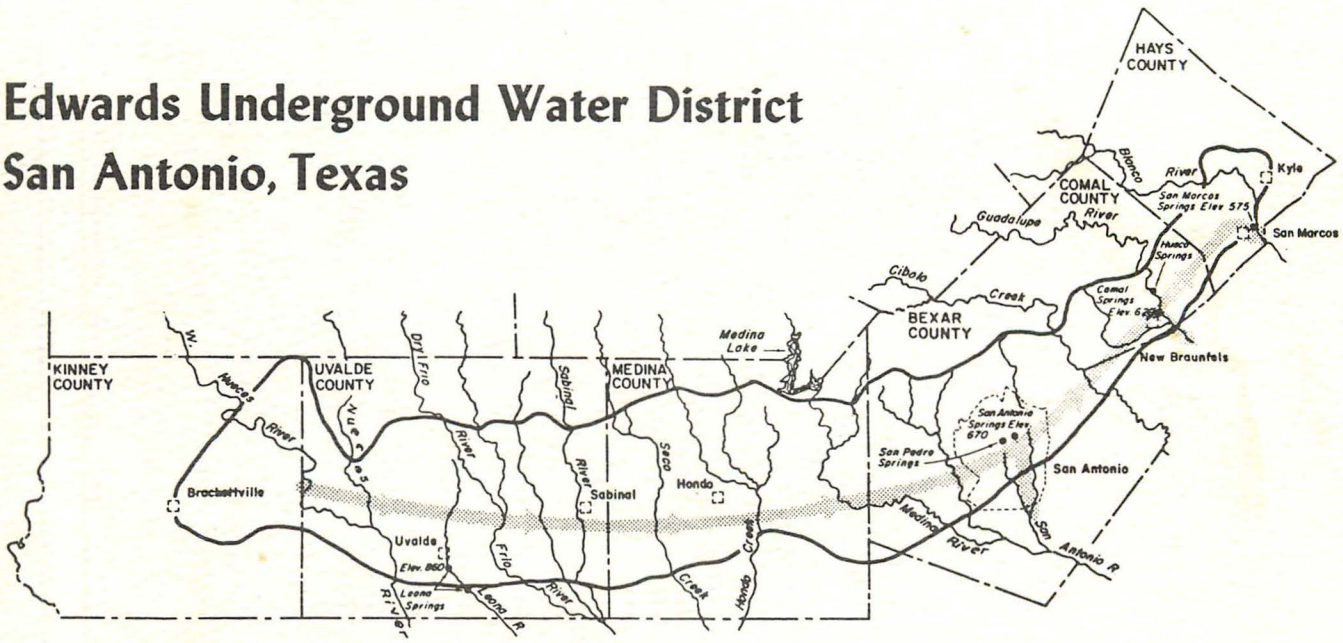
Chemical and Bacteriological Quality of Water at Selected Sites in the San Antonio Area, Texas February 1975 - September 1977

Edwards Underground Water District
San Antonio, Texas



Prepared in Cooperation with the U. S. Geological Survey and the Texas Water Development Board

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CHEMICAL AND BACTERIOLOGICAL QUALITY OF WATER AT SELECTED SITES IN THE SAN ANTONIO AREA, TEXAS

FEBRUARY 1975 - SEPTEMBER 1977

By

R. D. Reeves
U.S. Geological Survey

Prepared by the U.S. Geological Survey in cooperation
with the Edwards Underground Water District
and the Texas Department of Water Resources

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ABSTRACT

Water samples collected from 79 wells and 3 springs in the Edwards aquifer were analyzed for more than 50 properties or constituents, most of which affect the suitability of the water for domestic use. The samples were analyzed for bacteria; major inorganic constituents; minor elements, including heavy metals; and pesticides.

INTRODUCTION

Geologic and hydrologic investigations of the Edwards aquifer in the San Antonio area, Texas, have been conducted for many years by the U.S. Geological Survey in cooperation with the Texas Department of Water Resources, the Edwards Underground Water District, and the San Antonio City Water Board. As part of these investigations, a considerable amount of data have been collected on the inorganic chemical quality of water in the aquifer.

In 1968, the Geological Survey, in cooperation with the Texas Department of Water Resources and the Edwards Underground Water District, began a continuing program to collect historical-reference data for detecting pollution and for determining changes in the quality of water in the Edwards aquifer. The results of the study from August 1968 to August 1969 were reported by Reeves and Blakey (1970), and the results from August 1968 to April 1972 were reported by Reeves, Rawson, and Blakey (1972). The results of the study from its outset in August 1968 to January 1975 were reported by Reeves (1976).

In related studies, the Geological Survey, in cooperation with the Texas Department of Water Resources, has collected data since 1969 on the quality of urban runoff in San Antonio. Water-quality data collected in the urban study have been reported by Schulze, Dupuy, and Manigold (1970), Dupuy and Schulze (1972), Schulze, Dupuy, and McPherson (1973), and Rawson (1974). Water-quality data collected in the urban study have also been reported in an annual series of basic-data reports by Land (1971-72), Steger (1973-75), Gonzalez (1976), and Harmsen (1977).

PURPOSE AND SCOPE OF THIS REPORT

The purpose of this report is to provide a compilation of water-quality data collected for wells and springs from February 1975 to September 1977. A compilation of water-quality records for wells and springs in the San Antonio area will be published annually to provide for a more timely release of data. Additional interpretive reports will be published when sufficient data have been collected.

The water-quality data-collection sites for this study are shown on figure 1, which also shows the sites for which data are given in Reeves (1976). Although some of the wells are no longer in use, additional samples can be collected at most of the sites to detect any deterioration in water quality.

The results of the analyses of water samples from 79 wells and 3 springs in the Edwards aquifer collected from February 1975 to September 1977 are given in table 1. The samples were analyzed for more than 50 properties or constituents, most of which affect the suitability of the water for domestic use. The analyses included determination of the concentrations of bacteria; major inorganic constituents; minor elements, including heavy metals; and pesticides.

LOCATION OF THE SAN ANTONIO AREA

The San Antonio area, for the purpose of this report, includes all or parts of Bexar, Comal, Hays, Medina, Uvalde, and Kinney Counties in south-central Texas (fig. 1).

WELL-NUMBERING SYSTEM

The well-numbering system in Texas was developed by the Texas Department of Water Resources for use throughout the State. Under this system, each 1-degree quadrangle is given a number consisting of two digits. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7½-minute quadrangles which are given two-digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7½-minute quadrangle is divided into 2½-minute quadrangles which are given a single-digit number from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2½-minute quadrangle is given a two-digit number in the order in which it was inventoried, starting with 01. These are the last two digits of the well number.

Only the last three digits of the well number are shown at each location on figure 1; the first four digits are shown in the northwest corner of each 7½-minute quadrangle.

In addition to the seven-digit well number, a two-letter prefix is used to identify the county. The prefix for counties where wells were sampled are as follows: AY, Bexar; DX, Comal; LR, Hays; TD, Medina; and YP, Uvalde.

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TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA

BEXAR COUNTY

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
AY-68-21-804	77-06-28	1500	60	279	5.0	11	110	3.0	5.8	.6
	77-08-15	1155	10	279	10	--	--	--	--	--
	77-08-15	1245	60	279	10	12	110	3.5	3.6	.6
AY-68-27-502	75-07-29	1350	60	517	10	11	81	12	5.9	.8
	76-05-20	1300	--	517	--	--	--	--	--	--
	76-05-20	1330	30	517	10	11	71	18	6.0	.8
	77-08-31	1300	30	517	10	11	86	12	5.8	.6
AY-68-27-303	76-01-28	1120	10	354	15	--	--	--	--	--
	76-01-28	1210	60	354	15	--	--	--	--	--
	76-01-28	1321	10	354	15	--	--	--	--	--
	76-02-05	1025	10	354	15	--	--	--	--	--
	76-02-17	1220	10	354	15	--	--	--	--	--
	76-02-17	1310	60	354	15	11	92	11	5.0	.8
	76-03-09	1015	10	354	15	--	--	--	--	--
	76-03-09	1105	60	354	15	--	--	--	--	--
	76-04-06	1110	60	354	15	--	--	--	--	--
	76-04-06	1200	60	354	15	--	--	--	--	--
	76-04-20	1150	10	354	15	--	--	--	--	--
	76-04-20	1240	60	354	15	--	--	--	--	--
	76-04-27	0945	10	354	15	--	--	--	--	--
	76-04-27	1035	60	354	15	--	--	--	--	--
	76-05-07	1515	10	354	15	--	--	--	--	--
	76-05-07	1605	60	354	15	--	--	--	--	--
	76-05-08	0945	10	354	15	--	--	--	--	--
	76-05-08	1035	60	354	15	11	85	10	5.5	.9
	76-05-11	0930	10	354	15	--	--	--	--	--
	76-05-11	1020	60	354	15	--	--	--	--	--
	76-05-14	0930	10	354	15	--	--	--	--	--
	76-05-14	1020	60	354	15	--	--	--	--	--
	76-12-28	1305	10	354	15	--	--	--	--	--
	76-12-28	1355	60	354	15	11	90	11	5.1	.8
	77-08-06	1350	10	354	15	--	--	--	--	--
AY-68-27-303	77-08-06	1440	60	354	15	11	92	11	5.1	.9
	77-06-27	1215	60	354	15	10	91	9.0	4.8	.8
	77-08-11	1210	10	354	15	--	--	--	--	--
	77-08-11	1300	60	354	15	11	93	9.8	4.8	.7
AY-68-27-305	77-06-27	1100	60	253	3.0	10	95	8.6	5.1	.9
	77-08-11	1040	10	253	3	--	--	--	--	--
	77-08-11	1130	60	253	3.0	11	93	8.6	5.0	.8
AY-68-27-503	75-07-28	1450	120	435	250	11	81	15	6.8	1.0
	76-05-20	0840	--	435	225	11	82	16	6.7	.9
	77-05-17	0945	10	435	275	10	81	16	6.4	.9
	77-08-30	1205	10	435	275	11	83	15	6.9	.9
AY-68-27-504	75-07-28	1340	10	508	525	--	--	--	--	--
	75-07-28	1430	60	508	525	10	83	13	8.8	1.8
	76-05-20	0915	60	508	525	10	85	13	7.6	1.3
	77-05-17	1020	60	508	525	11	89	13	8.8	1.3
	77-08-30	1145	10	508	525	11	90	14	8.5	1.3
AY-68-27-507	75-08-12	1105	10	385	9.0	--	--	--	--	--
	75-08-12	1155	60	385	9.0	10	73	13	6.1	.9
AY-68-27-508	75-07-29	1200	60	343	10	11	87	12	7.4	.8
AY-68-27-510	75-07-28	1205	60	390	12	11	79	16	6.9	1.0
AY-68-27-603	75-08-12	1440	60	360	20	11	93	8.8	5.8	1.1
AY-68-27-605	75-08-12	1335	60	305	36	11	84	14	6.5	1.0
AY-68-27-606	77-06-27	0930	60	603	15	11	91	10	6.1	1.1
AY-68-27-701	75-09-23	1100	60	507	5.0	20	120	10	52	1.2
AY-68-27-705	75-09-23	1330	60	--	10	13	67	21	21	8.1
AY-68-27-706	75-09-24	1010	10	410	15	12	81	16	8.8	1.3
AY-68-28-202	75-06-30	1515	10	457	125	13	97	7.8	5.8	1.2
	76-05-24	1100	10	457	125	11	84	11	6.0	1.3
	77-05-25	1040	10	457	125	10	91	13	8.0	1.2
	77-08-25	1230	270	457	125	12	94	8.5	6.3	1.2
AY-68-28-203	75-06-30	1315	10	435	350	13	100	7.6	8.3	.8
	77-05-25	0950	10	435	350	12	100	7.4	8.0	.9
	77-08-25	1135	240	435	350	14	110	5.4	8.6	.9
AY-68-28-205	75-06-30	1440	10	485	285	14	110	8.6	7.4	1.1
AY-68-28-207	76-02-03	1225	10	265	3.0	--	--	--	--	--
	76-02-03	1235	20	265	3.0	--	--	--	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
AY-68-21-804	77-06-28	320	0	4.1	8.2	.1	1.5	.05	.02	300
	77-08-15	330	0	--	--	--	1.8	.00	.01	--
	77-08-15	330	0	4.6	7.8	.1	1.7	.00	.01	306
AY-68-27-302	75-07-29	291	0	12	11	.1	1.7	.00	.02	278
	76-05-20	--	--	--	--	--	--	--	--	--
	76-05-20	280	0	11	11	.3	1.6	.03	.00	269
	77-08-31	290	0	11	18	.1	1.8	.00	.00	288
AY-68-27-303	76-01-28	--	--	--	--	--	--	--	--	--
	76-01-28	--	--	--	--	--	--	--	--	--
	76-01-28	--	--	--	--	--	--	--	--	--
	76-02-03	--	--	--	--	--	--	--	--	--
	76-02-17	--	--	--	--	--	--	--	--	--
	76-02-17	302	0	7.6	9.8	.2	2.1	.00	.01	--
	76-03-09	--	--	--	--	--	--	--	--	--
	76-03-09	--	--	--	--	--	2.2	.00	.01	--
	76-04-06	--	--	--	--	--	--	--	--	--
	76-04-06	301	0	--	--	--	--	--	--	--
	76-04-20	--	--	--	--	--	2.2	.03	.00	--
	76-04-20	301	0	--	--	--	--	--	--	--
	76-04-27	--	--	--	--	--	--	--	--	--
	76-04-27	299	0	--	--	--	--	--	--	--
	76-05-07	--	--	--	--	--	--	--	--	--
	76-05-07	297	0	--	--	--	--	--	--	--
	76-05-08	--	--	--	--	--	1.9	.00	.00	--
	76-05-08	296	0	16	9.6	.2	2.0	.23	.00	288
	76-05-11	--	--	--	--	--	--	--	--	--
	76-05-11	295	0	--	--	--	--	--	--	--
	76-05-14	--	--	--	--	--	--	--	--	--
	76-05-14	294	0	--	--	--	--	--	--	--
	76-12-28	--	--	--	--	--	2.2	.00	.01	--
	76-12-28	304	0	9.8	10	.1	2.2	.01	.01	288
	77-04-06	300	0	--	--	--	2.1	.03	.01	--
AY-68-27-303	77-04-06	304	0	7.5	10	.1	2.1	.01	.00	288
	77-06-27	300	0	8.2	9.9	.1	2.2	.05	.00	282
	77-08-11	300	0	--	--	--	.01	.00	.02	--
	77-08-11	300	0	8.3	12	.1	2.3	.00	.01	288
AY-68-27-305	77-06-27	310	0	7.7	11	.1	2.3	.02	.00	294
	77-08-11	320	0	--	--	--	2.8	.01	.01	--
	77-08-11	310	0	8.5	12	.1	2.8	.00	.01	294
AY-68-27-503	75-07-28	288	0	18	13	.2	1.6	.01	.02	288
	76-05-20	286	0	16	13	.2	1.7	.00	.00	287
	77-05-17	289	0	19	13	.2	1.7	.01	.00	289
	77-08-30	290	0	17	17	.2	1.8	.00	.00	294
AY-68-27-504	75-07-28	--	--	--	--	--	.88	.00	.04	--
	75-07-28	287	0	26	13	.2	.93	.00	.03	298
	76-05-20	280	0	21	12	.2	1.2	.00	.01	289
	77-05-17	302	0	25	15	.2	.98	.00	.02	312
	77-08-30	310	0	25	16	.2	.97	.00	.00	319
AY-68-27-507	75-08-12	--	--	--	--	--	1.4	.00	.04	--
	75-08-12	262	0	14	11	.2	1.4	.00	.04	258
AY-68-27-508	75-07-29	297	0	19	14	.2	1.7	.00	.01	298
AY-68-27-510	75-07-28	274	0	18	13	.2	1.4	.00	.01	276
AY-68-27-603	75-08-12	305	0	9.3	10	.1	2.8	.00	.02	290
AY-68-27-605	75-08-12	294	0	13	12	.1	2.1	.00	.04	287
AY-68-27-606	77-06-27	300	0	11	12	.1	2.4	.01	.00	291
AY-68-27-701	75-09-23	273	0	27	44	.2	39	.00	.01	409
AY-68-27-705	75-09-23	261	0	53	23	.8	.51	.00	.00	333
AY-68-27-706	75-09-24	267	0	36	13	.3	1.2	.00	.02	301
AY-68-28-202	75-06-30	297	0	11	13	.2	.89	.00	.01	296
	76-05-24	298	0	19	9.7	.2	.69	.07	.01	289
	77-05-25	296	0	35	13	.2	.94	.00	.00	318
	77-08-25	300	0	12	14	.1	.91	.00	.02	296
AY-68-28-203	75-06-30	308	0	7.0	17	.1	.98	.00	.00	306
	77-05-25	320	0	11	18	.1	1.1	.01	.00	315
	77-08-25	330	0	4.2	22	.1	1.3	.00	.02	328
AY-68-28-205	75-06-30	356	0	5.2	15	.1	.44	.00	.00	337
AY-68-28-207	76-02-03	--	--	--	--	--	--	--	--	--
	76-02-03	--	--	--	--	--	--	--	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)
AY-68-21-804	77-06-28	290	25	3	.1	475	7.0	23.0	.2	100
	77-08-15	--	--	--	--	532	7.2	23.5	--	80
	77-08-15	290	19	3	.1	534	7.1	23.5	--	34
AY-68-27-302	75-07-29	250	14	5	.2	502	7.3	24.0	--	0
	76-05-20	--	--	--	--	--	--	--	--	--
	76-05-20	250	23	5	.2	479	7.4	22.5	--	0
	77-08-31	260	26	5	.2	492	7.3	22.5	--	0
AY-68-27-303	76-01-28	--	--	--	--	494	--	22.0	--	0
	76-01-28	--	--	--	--	494	--	22.0	--	0
	76-01-28	--	--	--	--	496	--	22.0	--	1
	76-02-03	--	--	--	--	508	--	22.0	--	1
	76-02-17	--	--	--	--	532	--	22.5	--	0
	76-02-17	280	--	4	.1	527	7.1	22.7	.6	0
	76-03-09	--	--	--	--	512	--	22.0	--	0
	76-03-09	--	--	--	--	526	--	22.0	--	0
	76-04-06	--	--	--	--	508	--	22.0	--	0
	76-04-06	--	--	--	--	506	7.2	22.5	--	0
	76-04-20	--	--	--	--	498	--	22.5	--	0
	76-04-20	--	--	--	--	512	7.3	22.5	--	0
	76-04-27	--	--	--	--	520	--	22.5	--	0
	76-04-27	--	--	--	--	516	7.3	22.5	--	0
	76-05-07	--	--	--	--	516	--	23.0	--	0
	76-05-07	--	--	--	--	516	7.2	23.0	1.2	0
	76-05-08	--	--	--	--	--	--	23.0	--	11
	76-05-08	270	27	4	.1	507	7.2	23.0	1.2	50
	76-05-11	--	--	--	--	516	--	23.0	--	0
	76-05-11	--	--	--	--	516	7.3	23.0	--	0
	76-05-14	--	--	--	--	514	--	22.5	--	0
	76-05-14	--	--	--	--	514	7.2	22.5	1.1	0
	76-12-28	--	--	--	--	505	--	22.5	--	0
	76-12-28	270	21	4	.1	505	7.2	22.5	.5	0
	77-04-06	--	--	--	--	517	7.2	23.0	--	0
AY-68-27-304	77-04-06	280	26	4	.1	513	7.2	23.0	.6	0
	77-06-27	270	20	4	.1	522	7.1	22.5	.2	0
	77-08-11	--	--	--	--	536	7.2	22.5	--	0
	77-08-11	270	27	4	.1	536	7.2	22.5	--	0
AY-68-27-305	77-06-27	270	18	4	.1	525	7.0	22.5	.7	2600
	77-08-11	--	--	--	--	547	7.3	22.0	--	800
	77-08-11	270	14	4	.1	547	7.2	21.0	--	6300
AY-68-27-503	75-07-28	260	28	5	.2	516	7.4	22.5	--	0
	76-05-20	270	37	5	.2	511	7.4	21.5	--	0
	77-05-17	270	31	5	.2	518	7.2	21.5	--	0
	77-08-30	270	31	5	.2	516	7.3	21.5	--	0
AY-68-27-504	75-07-28	--	--	--	--	530	--	24.0	--	20
	75-07-28	260	26	7	.2	521	7.3	23.0	--	16
	76-05-20	270	36	6	.2	494	7.4	21.0	--	2
	77-05-17	280	28	6	.2	545	7.4	22.5	--	120
	77-08-30	280	28	6	.2	556	7.3	21.5	--	0
AY-68-27-507	75-08-12	--	--	--	--	--	--	22.5	--	0
	75-08-12	240	21	5	.2	480	7.0	22.5	--	0
AY-68-27-508	75-07-29	270	24	6	.2	538	7.2	22.5	--	0
AY-68-27-510	75-07-28	250	27	6	.2	516	7.4	23.0	--	0
AY-68-27-603	75-08-12	270	19	4	.2	551	6.9	23.0	--	7
AY-68-27-605	75-08-12	270	27	5	.2	538	7.0	23.0	--	0
AY-68-27-606	77-06-27	270	22	5	.2	524	7.1	22.5	--	0
AY-68-27-701	75-09-23	340	120	25	1.2	905	7.2	23.0	--	4
AY-68-27-705	75-09-23	260	41	15	.6	553	7.4	23.0	--	0
AY-68-27-706	75-09-24	270	50	7	.2	522	7.1	22.0	--	12
AY-68-28-202	75-06-30	270	31	4	.2	513	7.0	23.5	--	0
	76-05-24	260	11	5	.2	515	7.3	22.5	--	15
	77-05-25	280	38	6	.2	553	7.3	22.5	--	7
	77-08-25	270	24	5	.2	533	7.4	22.5	--	9
AY-68-28-203	75-06-30	280	29	6	.2	553	6.8	24.0	--	0
	77-05-25	280	18	6	.2	558	7.1	23.0	--	0
	77-08-25	300	26	6	.2	615	7.3	22.5	--	0
AY-68-28-205	75-06-30	310	18	5	.2	598	6.8	23.5	--	0
AY-68-28-207	76-02-03	--	--	--	--	580	--	22.0	--	1
	76-02-03	--	--	--	--	422	--	22.0	--	0

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	FECAL COLIFORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COLONIES PER 100 ML) (31679)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
AY-68-21-804	77-06-28	0	3	.6	.10
	77-08-15	0	0	.3	.00
	77-08-15	0	0	.1	.00
AY-68-27-302	75-07-29	0	0	.6	--
	76-05-20	--	--	--	--
	76-05-20	0	0	.4	.00
	77-08-31	0	0	.3	.10
AY-68-27-303	76-01-28	0	0	--	--
	76-01-28	0	0	--	--
	76-01-28	0	0	--	--
	76-02-03	0	0	--	--
	76-02-17	0	0	--	--
	76-02-17	0	0	1.0	.00
	76-03-09	0	0	--	--
	76-03-09	0	10	2.4	--
	76-04-06	0	0	--	--
	76-04-06	0	0	--	--
	76-04-20	0	0	--	--
	76-04-20	0	0	--	--
	76-04-27	0	0	--	--
	76-04-27	0	0	--	--
	76-05-07	0	0	--	--
	76-05-07	0	0	--	--
	76-05-18	0	0	6.6	--
	76-05-18	0	0	1.6	.00
	76-05-11	0	0	--	--
	76-05-11	0	0	--	--
	76-05-14	0	0	--	--
	76-05-14	0	0	--	--
	76-12-28	0	0	3.2	.00
	76-12-28	0	0	6.4	.00
	77-04-06	0	0	3.1	--
AY-68-27-303	77-04-06	0	0	.0	.00
	77-06-27	0	0	.0	.00
	77-08-11	0	0	.0	.00
	77-08-11	0	0	.0	.00
AY-68-27-305	77-06-27	0	83	.8	.00
	77-08-11	0	32	1.3	.00
	77-08-11	1	55	1.0	.00
AY-68-27-503	75-07-28	0	0	.4	--
	76-05-20	0	0	3.0	.00
	77-05-17	0	2	.7	.00
	77-08-30	0	0	.2	.10
AY-68-27-504	75-07-28	2	5	.6	--
	75-07-28	1	3	.6	--
	76-05-20	0	0	.8	.00
	77-05-17	19	11	1.0	.00
	77-08-30	0	0	2.9	.10
AY-68-27-507	75-08-12	0	0	11	--
	75-08-12	0	0	--	--
AY-68-27-508	75-07-29	0	0	2.4	--
AY-68-27-510	75-07-28	0	0	.3	--
AY-68-27-603	75-08-12	0	0	.8	--
AY-68-27-605	75-08-12	0	0	--	--
AY-68-27-606	77-06-27	0	0	2.4	.00
AY-68-27-701	75-09-23	0	0	--	--
AY-68-27-705	75-09-23	0	0	4.2	--
AY-68-27-706	75-09-24	0	0	3.8	--
AY-68-28-202	75-06-30	0	0	4.0	--
	76-05-24	8	15	4.2	.00
	77-05-25	4	1	1.1	.00
	77-08-25	0	0	.1	.10
AY-68-28-203	75-06-30	0	0	4.1	--
	77-05-25	0	0	4.0	.00
	77-08-25	0	0	.6	--
AY-68-28-205	75-06-30	0	0	6.2	--
AY-68-28-207	76-02-03	0	0	--	--
	76-02-03	0	0	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
AY-68-28-207	76-02-18	0925	10	265	3.0	--	--	--	--	--
	76-02-18	0935	20	365	3.0	9.4	52	28	5.2	1.5
	76-03-09	1150	10	365	3.0	--	--	--	--	--
	76-03-09	1200	20	365	3.0	--	--	--	--	--
	76-04-06	1320	10	365	3.0	--	--	--	--	--
	76-04-06	1330	20	365	3.0	--	--	--	--	--
	76-04-20	1347	10	365	3.0	--	--	--	--	--
	76-04-20	1357	20	365	3.0	--	--	--	--	--
	76-04-20	1407	30	365	3.0	--	--	--	--	--
	76-04-27	1115	10	365	3.0	--	--	--	--	--
	76-04-27	1125	20	365	3.0	--	--	--	--	--
	76-05-11	1110	10	--	--	--	--	--	--	--
	76-05-11	1120	20	265	3.0	--	--	--	--	--
	76-11-11	1320	10	265	3.0	--	--	--	--	--
	76-11-11	1330	20	265	3.0	--	--	--	--	--
AY-68-28-501	76-05-24	1145	10	468	100	12	81	12	6.0	1.2
	77-05-25	1115	10	468	100	12	91	12	6.0	1.3
	77-08-25	1300	300	468	100	13	99	5.2	6.4	1.0
AY-68-28-502	75-06-30	1610	10	506	110	12	87	18	6.5	1.3
	76-05-24	1215	10	506	110	12	82	17	6.0	1.5
	77-05-25	1145	10	506	110	11	74	27	7.0	1.9
	77-08-25	1400	360	506	110	13	93	12	5.8	1.1
AY-68-28-505	75-07-29	0930	60	456	10	12	100	6.1	5.6	.9
AY-68-28-508	76-05-24	1245	240	396	--	11	65	13	5.8	.7
	77-06-16	1445	480	396	500	10	68	8.1	5.9	.7
AY-68-28-511	77-08-31	1130	300	454	100	13	91	7.4	8.1	.8
AY-68-28-512	77-09-03	1530	60	400	7.5	12	97	7.1	5.7	.9
AY-68-28-601	75-08-12	1005	75	425	50	13	88	8.3	9.7	1.3
AY-68-28-608	77-06-27	1430	60	500	15	10	96	11	7.3	1.1
	77-08-18	1130	60	500	15	13	99	5.0	5.9	1.1
AY-68-28-903	75-07-29	0820	10	762	3500	14	110	13	17	1.4
	76-05-25	1000	30	762	3500	14	110	12	18	1.4
	77-06-28	1200	10	762	3500	15	120	12	25	1.6
AY-68-29-109	76-05-21	0915	180	460	450	13	100	11	7.3	7.0
	77-06-07	0900	180	460	450	13	100	11	8.4	.7
AY-68-29-206	75-03-11	1420	60	390	10	11	87	15	4.5	1.1
AY-68-29-208	77-04-21	1035	10	266	10	--	--	--	--	--
	77-04-21	1125	60	266	10	12	99	4.3	4.9	.5
	77-08-15	1320	10	266	10	--	--	--	--	--
	77-08-15	1410	60	266	10	13	100	3.2	5.2	.4
AY-68-29-209	77-04-21	0910	10	315	10	--	--	--	--	--
	77-04-21	1000	60	315	10	13	97	2.3	4.1	.6
	77-08-15	1020	10	315	10	--	--	--	--	--
	77-08-15	1110	60	315	10	14	110	1.9	4	.6
AY-68-29-210	77-08-16	1300	60	330	3.0	12	97	8.6	4.6	.7
AY-68-29-303	75-08-13	1000	180	527	150	11	95	11	4.7	.9
	76-05-24	1315	300	527	150	12	95	9.4	4.7	.9
	77-05-11	1045	240	527	150	11	100	9.4	4.3	.9
AY-68-29-401	77-06-07	0930	210	517	600	13	100	12	8.6	.8
AY-68-29-405	75-08-14	1015	15	395	100	13	100	11	9.7	1.6
	76-05-21	1415	240	395	100	13	100	11	10	1.4
	77-06-07	1230	240	395	100	13	110	10	10	1.5
AY-68-29-410	76-05-21	0945	10	318	620	13	88	18	6.3	.7
AY-68-29-702	75-08-13	0910	--	872	1500	11	94	14	8.0	1.2
	77-08-17	1000	120	872	3000	11	94	13	7.4	1.1
AY-68-29-805	75-08-14	1155	10	800	2700	12	82	17	9.0	1.5
	77-06-07	1200	30	800	2700	12	85	17	9.4	1.3
AY-68-30-102	75-08-13	1115	--	418	1000	11	90	6.8	6.3	.9
	77-05-24	1200	60	418	1000	11	94	6.3	7.0	.9
AY-68-30-108	75-08-13	1215	30	1970	20	12	99	5.7	6.7	.8
AY-68-35-102	77-08-30	1325	10	--	--	12	81	18	7.8	1.2
AY-68-36-104	77-05-16	1015	180	808	5000	12	85	16	9.5	1.5
AY-68-37-101	77-06-14	1000	180	1005	3500	12	78	18	8.8	1.3
AY-68-37-127	77-09-29	1230	--	407	1000	13	63	13	7.7	1.1
AY-68-37-404	76-05-21	1200	720	1326	4000	12	68	16	8.9	1.0
	77-08-17	1245	1440	1326	4000	13	65	16	7.6	1.0
AY-68-37-507	76-03-15	--	--	1108	3000	--	66	16	8.3	1.1

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
AY-68-28-207	76-02-18	--	--	--	--	--	--	--	--	--
	76-02-18	265	0	30	7.2	.6	.12	.12	.01	--
	76-03-09	--	--	--	--	--	--	--	--	--
	76-03-09	--	--	--	--	--	--	--	--	--
	76-04-06	--	--	--	--	--	--	--	--	--
	76-04-06	282	0	--	--	--	--	--	--	--
	76-04-20	--	--	--	--	--	--	--	--	--
	76-04-20	277	0	30	6.8	.6	1.4	.01	.01	--
	76-04-20	--	--	--	--	--	--	--	--	--
	76-04-27	--	--	--	--	--	--	--	--	--
	76-04-27	294	0	--	--	--	--	--	--	--
	76-05-11	--	--	--	--	--	--	--	--	--
	76-05-11	258	0	--	--	--	--	--	--	--
	76-11-11	--	--	--	--	--	--	--	--	--
	76-11-11	--	--	--	--	--	--	--	--	--
AY-68-28-501	76-05-24	299	0	16	12	.2	.59	.00	.00	289
	77-05-25	304	0	24	15	.2	.56	.00	.00	311
	77-08-25	310	0	16	15	.1	.81	.00	.02	309
AY-68-28-502	75-06-30	316	0	22	13	.3	1.0	.00	.00	318
	76-05-24	327	0	22	11	.3	.74	.08	.00	316
	77-05-25	306	0	42	12	.5	.71	.00	.00	326
	77-08-25	330	0	9.4	12	.2	--	--	--	309
AY-68-28-505	75-07-29	328	0	7.7	9.5	.1	.84	.00	.02	304
AY-68-28-508	76-05-24	226	0	17	10	.2	2.7	.07	.00	235
	77-06-16	210	0	19	13	.2	1.1	.01	.06	228
AY-68-28-511	77-08-31	300	0	11	16	.1	1.2	.00	.00	296
AY-68-28-512	77-09-03	300	0	15	13	.1	1.4	.00	.01	300
AY-68-28-601	75-08-12	294	0	15	12	.1	.86	.00	.04	293
AY-68-28-608	77-06-27	310	0	24	13	.2	.97	.04	.00	316
	77-08-18	310	0	10	13	.1	1.1	.00	.02	301
AY-68-28-903	75-07-29	378	0	23	20	.2	1.7	.00	.03	385
	76-05-25	382	0	22	22	.3	1.8	.00	.00	389
	77-06-28	410	0	24	26	.2	2.3	.01	.02	426
AY-68-29-109	76-05-21	338	0	7.3	14	.2	1.2	.01	.01	326
	77-06-07	340	0	11	16	.1	1.4	.01	.04	328
AY-68-29-206	75-03-11	312	0	9.0	8.4	.1	1.4	.01	.00	290
AY-68-29-208	77-04-21	314	0	--	--	--	.86	.01	.00	--
	77-04-21	310	0	4.4	9.2	.1	.84	.01	.00	288
	77-08-15	320	0	--	--	--	.83	.00	.01	--
	77-08-15	320	0	4.2	10	.3	.87	.00	.01	295
AY-68-29-209	77-04-21	--	--	--	--	--	1.5	.01	.01	--
	77-04-21	310	0	3.0	8.5	.0	1.5	.01	.01	282
	77-08-15	320	0	--	--	--	1.6	.00	.02	--
	77-08-15	320	0	3.3	8.7	.0	1.6	.00	.02	301
AY-68-29-210	77-08-16	320	0	8.5	8.6	.1	1.2	.00	.01	300
AY-68-29-303	75-08-13	326	0	9.8	7.7	.1	1.6	.00	.05	301
	76-05-24	335	0	8.7	8.9	.1	1.4	.01	.01	305
	77-05-11	336	0	9.9	8.6	.1	1.4	.00	.01	310
AY-68-29-401	77-06-07	340	0	21	15	.2	1.4	.01	.01	338
AY-68-29-405	75-08-14	342	0	15	14	.2	1.5	.00	.05	333
	76-05-21	346	0	13	15	.2	1.4	.08	.00	332
	77-06-07	350	0	17	15	.2	1.4	.01	.02	349
AY-68-29-410	76-05-21	334	0	7.3	11	.2	.92	.15	.00	309
AY-68-29-702	75-08-13	309	0	23	12	.2	1.4	.00	.04	316
	77-08-17	310	0	23	14	.2	1.3	.00	.02	317
AY-68-29-805	75-08-14	282	0	29	14	.2	1.9	.03	.04	304
	77-06-07	290	0	30	15	.2	1.8	.00	.00	313
AY-68-30-102	75-08-13	260	0	22	11	.2	.94	.00	.04	277
	77-05-24	272	0	24	12	.2	.96	.01	.00	290
AY-68-30-104	75-08-13	295	0	17	10	.1	1.2	.00	.04	297
AY-68-35-102	77-08-30	280	0	43	15	.2	1.6	.00	.00	316
AY-68-36-104	77-05-16	286	0	30	15	.2	2.5	.00	.00	310
AY-68-37-101	77-06-14	270	0	34	16	.2	1.4	.03	.03	301
AY-68-37-127	77-09-29	250	0	13	13	.2	--	--	--	247
AY-68-37-404	76-05-21	248	0	15	15	.2	1.7	.13	.01	258
	77-08-17	240	0	15	17	.2	1.8	.00	.01	253
AY-68-37-507	76-03-15	244	0	20	15	--	--	--	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)
AY-68-28-207	76-02-18	--	--	--	--	488	--	21.5	--	0
	76-02-18	250	--	4	.1	442	7.3	21.7	--	0
	76-03-09	--	--	--	--	523	--	22.0	--	0
	76-03-09	--	--	--	--	488	--	21.5	--	0
	76-04-06	--	--	--	--	530	--	22.0	--	0
	76-04-06	--	--	--	--	494	7.3	22.0	--	0
	76-04-20	--	--	--	--	491	--	22.0	--	250
	76-04-20	--	--	--	--	501	7.4	22.0	--	260
	76-04-20	--	--	--	--	438	--	22.0	--	150
	76-04-27	--	--	--	--	512	--	22.0	--	200
	76-04-27	--	--	--	--	515	7.2	22.0	--	170
	76-05-11	--	--	--	--	466	--	22.0	--	100
	76-05-11	--	--	--	--	443	7.4	22.0	--	280
	76-11-11	--	--	--	--	469	--	22.0	--	160
	76-11-11	--	--	--	--	455	--	22.0	--	160
AY-68-28-501	76-05-24	250	8	5	.2	514	7.3	--	--	0
	77-05-25	280	27	4	.2	553	7.1	22.5	--	0
	77-08-25	270	15	5	.2	535	7.2	22.5	--	0
AY-68-28-502	75-06-30	290	34	5	.2	540	7.0	24.0	--	0
	76-05-24	280	9	5	.2	565	7.4	27.5	--	0
	77-05-25	300	45	5	.2	570	7.4	23.5	--	0
	77-08-25	280	11	4	.2	561	7.2	23.0	--	0
AY-68-28-505	75-07-29	280	6	4	.1	530	7.3	23.0	--	0
AY-68-28-508	76-05-24	220	31	6	.2	428	7.5	22.5	--	0
	77-06-16	200	28	6	.2	420	7.3	22.0	--	0
AY-68-28-511	77-08-31	260	12	6	.2	512	7.2	22.5	--	--
AY-68-28-512	77-09-03	270	26	4	.2	520	7.3	23.0	--	0
AY-68-28-601	75-08-12	250	13	8	.3	519	6.9	23.5	--	0
AY-68-28-608	77-06-27	290	31	5	.2	550	7.0	22.0	.5	58
	77-08-18	270	14	5	.2	553	7.1	22.0	--	0
AY-68-28-903	75-07-29	330	19	10	.4	660	7.1	22.0	--	0
	76-05-25	320	11	11	.4	675	7.3	22.0	--	0
	77-06-28	350	13	13	.6	735	6.9	22.5	--	0
AY-68-29-109	76-05-21	300	18	5	.2	559	7.3	22.5	--	0
	77-06-07	300	16	6	.2	599	7.1	22.5	--	1
AY-68-29-206	75-03-11	280	23	3	.1	522	7.4	22.5	--	--
AY-68-29-208	77-04-21	--	--	--	--	502	7.2	24.0	--	0
	77-04-21	270	16	4	.1	500	7.2	24.0	.7	0
	77-08-15	--	--	--	--	526	7.2	23.0	--	1
	77-08-15	260	1	4	.1	528	7.2	23.0	--	0
AY-68-29-209	77-04-21	--	--	--	--	503	7.3	24.0	--	0
	77-04-21	250	0	3	.1	499	7.2	24.0	1.1	0
	77-08-15	--	--	--	--	520	7.3	23.0	--	4
	77-08-15	280	20	3	.1	520	7.2	23.0	--	0
AY-68-29-210	77-08-16	280	15	3	.1	521	7.1	22.5	--	37
AY-68-29-303	75-08-13	280	15	3	.1	544	6.8	22.5	--	0
	76-05-24	280	1	4	.1	548	7.3	23.0	--	0
	77-05-11	290	13	3	.1	545	7.1	22.0	--	0
AY-68-29-401	77-06-07	300	20	6	.2	614	7.1	23.0	--	0
AY-68-29-405	75-08-14	300	15	7	.2	590	7.0	23.0	--	--
	76-05-21	300	16	7	.3	593	7.4	22.5	--	--
	77-06-07	320	29	6	.2	604	7.3	23.0	--	0
AY-68-29-410	76-05-21	290	20	4	.2	540	7.3	23.0	--	0
AY-68-29-702	75-08-13	290	39	6	.2	559	6.9	22.5	--	0
	77-08-17	290	34	5	.2	564	7.2	22.0	--	0
AY-68-29-805	75-08-14	280	44	7	.2	543	7.1	--	--	--
	77-06-07	280	44	7	.2	564	7.6	23.0	--	0
AY-68-30-102	75-08-13	250	40	5	.2	489	7.0	22.5	--	0
	77-05-24	260	38	6	.2	510	6.9	22.5	--	--
AY-68-30-108	75-08-13	270	29	5	.2	506	7.0	23.0	--	4
AY-68-35-102	77-08-30	280	47	6	.2	536	7.5	22.5	--	0
AY-68-36-104	77-05-16	280	44	7	.2	550	7.3	22.0	--	0
AY-68-37-101	77-06-14	270	47	7	.2	532	7.0	23.0	--	0
AY-68-37-127	77-09-29	210	6	7	.2	465	7.3	24.5	--	--
AY-68-37-404	76-05-21	240	32	8	.3	454	7.5	24.5	--	0
	77-08-17	230	31	7	.2	462	7.4	24.5	--	0
AY-68-37-507	76-03-15	230	31	7	.2	460	7.4	27.0	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	FECAL COLIFORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COLONIES PER 100 ML) (31679)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
AY-68-28-207	76-02-18	0	0	--	--
	76-02-18	0	0	1.2	--
	76-03-09	0	0	--	--
	76-03-09	0	0	--	--
	76-04-06	0	0	--	--
	76-04-06	0	0	--	--
	76-04-20	190	310	--	--
	76-04-20	120	190	3.2	.00
	76-04-20	95	340	--	--
	76-04-27	0	0	--	--
	76-04-27	0	8	--	--
	76-05-11	4	130	--	--
	76-05-11	4	130	--	--
	76-11-11	--	--	--	--
	76-11-11	--	--	--	--
AY-68-28-501	76-05-24	0	0	3.3	.00
	77-05-25	--	--	1.9	.30
	77-08-25	--	--	.0	.00
AY-68-28-502	75-06-30	0	0	1.0	--
	76-05-24	0	0	.6	.00
	77-05-25	--	--	2.6	.10
	77-08-25	--	--	--	--
AY-68-28-505	75-07-29	0	0	1.1	--
AY-68-28-508	76-05-24	0	0	2.4	.00
	77-06-16	--	--	.9	.00
AY-68-28-511	77-08-31	--	--	1.3	.10
AY-68-28-512	77-09-03	--	--	--	.00
AY-68-28-601	75-08-12	0	0	2.0	--
AY-68-28-608	77-06-27	--	--	1.1	.00
	77-08-18	--	--	--	.00
AY-68-28-903	75-07-29	0	0	3.0	--
	76-05-25	0	0	3.3	.00
	77-06-28	--	--	1.7	.00
AY-68-29-109	76-05-21	0	0	.8	.00
	77-06-07	--	--	1.2	.00
AY-68-29-206	75-03-11	--	--	.8	--
AY-68-29-208	77-04-21	0	2	5.1	--
	77-04-21	1	4	4.0	.10
	77-08-15	0	0	.1	.00
	77-08-15	0	0	1.5	.00
AY-68-29-209	77-04-21	0	2	--	--
	77-04-21	0	56	5.5	.00
	77-08-15	0	200	.4	.00
	77-08-15	0	0	.1	.00
AY-68-29-210	77-08-16	0	0	5.3	.00
AY-68-29-303	75-08-13	0	0	1.7	--
	76-05-24	0	2	.2	.00
	77-05-11	0	0	.6	.00
AY-68-29-401	77-06-07	0	0	2.0	.00
AY-68-29-405	75-08-14	--	--	1.0	--
	76-05-21	--	--	2.8	.00
	77-04-07	0	0	.4	.00
AY-68-29-410	76-05-21	0	0	2.5	.00
AY-68-29-702	75-08-13	0	0	--	--
	77-08-17	0	0	3.0	.00
AY-68-29-805	75-08-14	--	--	6.4	--
	77-06-07	0	0	.5	.00
AY-68-30-102	75-08-13	0	0	.6	--
	77-05-24	--	--	2.5	.10
AY-68-30-108	75-08-13	0	2	2.6	--
AY-68-35-102	77-08-30	0	0	.6	.10
AY-68-36-104	77-05-16	0	0	1.3	.00
AY-68-37-101	77-06-14	0	0	.3	.00
AY-68-37-127	77-09-29	--	--	.4	.10
AY-68-37-404	76-05-21	0	0	.2	.00
	77-08-17	0	0	.1	.00
AY-68-37-507	76-03-15	--	--	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	DISSOLVED ALUMINUM (AL) (UG/L) (01106)	DISSOLVED ARSENIC (AS) (UG/L) (01000)	DISSOLVED CADMIUM (CD) (UG/L) (01025)	DISSOLVED CHROMIUM (CR) (UG/L) (01030)	DISSOLVED COBALT (CO) (UG/L) (01035)
AY-68-21-804	77-06-28	1500	279	5.0	60	--	1	0	0	--
AY-68-27-302	75-07-29	1350	517	10	60	10	0	1	0	0
	76-05-20	1330	517	10	30	30	0	0	0	0
	77-08-31	1300	517	10	30	--	0	0	0	--
AY-68-27-304	76-12-28	1355	358	15	60	--	2	0	6	--
	77-04-06	1440	358	15	60	--	0	0	1	--
	77-06-27	1215	358	15	60	--	0	2	0	--
	77-08-11	1300	358	15	60	--	0	0	0	--
AY-68-27-305	77-06-27	1100	253	3.0	60	--	0	0	0	--
	77-08-11	1130	253	3.0	60	--	1	0	0	--
AY-68-27-503	75-07-28	1450	435	250	120	10	0	0	10	0
	76-05-20	0840	435	225	--	10	0	0	0	0
	77-05-17	0945	435	275	10	--	0	0	0	--
	77-08-30	1205	435	275	10	--	0	0	0	--
AY-68-27-504	75-07-28	1430	508	525	60	10	0	0	0	0
	76-05-20	0915	508	525	60	10	0	0	0	0
	77-05-17	1020	508	525	60	--	0	0	0	--
	77-08-30	1145	508	525	10	--	0	0	0	--
AY-68-27-507	75-08-12	1155	385	9.0	60	20	0	0	0	0
AY-68-27-508	75-07-29	1200	343	10	60	0	0	0	0	0
AY-68-27-510	75-07-28	1205	390	12	60	10	0	0	0	0
AY-68-27-603	75-08-12	1440	360	20	60	0	0	0	0	0
AY-68-27-605	75-08-12	1335	305	36	60	0	0	0	0	0
AY-68-27-606	77-06-27	0930	603	15	60	--	0	0	0	--
AY-68-27-705	75-09-23	1330	--	10	60	0	0	1	10	0
AY-68-27-706	75-09-24	1010	410	15	10	0	0	0	10	0
AY-68-28-202	75-06-30	1515	457	125	10	10	0	1	0	1
	77-05-25	1040	457	125	10	--	0	0	0	--
	77-08-25	1230	457	125	270	--	0	0	0	--
AY-68-28-203	75-06-30	1315	435	350	10	0	0	0	0	0
	77-05-25	0950	435	350	10	--	0	0	0	--
	77-08-25	1135	435	350	240	--	0	0	0	--
AY-68-28-501	76-05-24	1145	468	100	10	20	0	0	0	0
AY-68-28-501	77-05-25	1115	468	100	10	--	1	0	0	--
	77-08-25	1300	468	100	300	--	0	0	0	--
AY-68-28-502	75-06-30	1610	506	110	10	10	0	0	0	0
	76-05-24	1215	506	110	10	20	0	0	0	0
	77-05-25	1145	506	110	10	--	0	1	0	--
	77-08-25	1400	506	110	360	--	0	0	0	--
AY-68-28-505	75-07-29	0930	456	10	60	0	0	0	34	0
AY-68-28-508	76-05-24	1245	396	--	240	20	0	0	0	0
	77-06-16	1445	396	500	480	--	0	0	10	--
AY-68-28-511	77-08-31	1130	--	100	300	--	1	0	0	--
AY-68-28-512	77-09-03	1530	400	7.5	60	--	1	0	0	--
AY-68-28-601	75-08-12	1005	425	50	75	30	0	1	0	0
AY-68-28-608	77-06-27	1430	500	15	60	--	0	1	0	--
	77-08-18	1130	500	15	60	--	0	0	0	--
AY-68-28-903	75-07-29	0820	762	3500	10	0	2	0	0	0
	76-05-25	1000	762	3500	30	10	0	0	0	0
	77-06-28	1200	762	3500	10	--	0	0	0	--
AY-68-29-109	77-06-07	0900	460	450	180	--	0	0	0	--
AY-68-29-206	75-03-11	1420	390	--	--	50	0	0	0	1
AY-68-29-208	77-04-21	1125	266	10	60	--	0	0	14	--
AY-68-29-209	77-04-21	1000	315	10	60	--	0	0	11	--
AY-68-29-303	75-08-13	1000	527	150	180	10	0	0	0	0
	76-05-24	1315	527	150	300	10	0	0	0	0
	77-05-11	1045	527	150	240	--	0	0	0	--
AY-68-29-401	77-06-07	0930	517	600	210	--	0	0	0	--
AY-68-29-405	75-08-14	1015	395	100	15	0	0	0	10	0
	76-05-21	1415	395	100	240	20	0	0	0	0
	77-06-07	1230	395	100	240	--	0	0	0	--
AY-68-29-702	75-08-13	0910	872	1500	--	0	0	0	20	0
AY-68-29-805	75-08-14	1155	800	2700	10	0	0	0	10	0
	77-06-07	1200	800	2700	30	--	0	0	10	--
AY-68-30-102	75-08-13	1115	418	1000	--	0	0	0	0	0
	77-05-24	1200	418	1000	60	--	0	0	0	--
AY-68-30-108	75-08-13	1215	1970	20	30	0	0	0	0	0
AY-68-36-104	77-05-16	1015	808	5000	180	--	0	0	0	--
AY-68-37-101	77-06-14	1000	1005	3500	180	--	0	0	10	--
AY-68-37-127	77-09-29	1230	407	1000	--	--	1	0	10	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	DIS-SOLVED COPPER (CU) (UG/L) (01040)	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	DIS-SOLVED MANGANESE (MN) (UG/L) (01056)	DIS-SOLVED MERCURY (HG) (UG/L) (71890)	DIS-SOLVED NICKEL (NI) (UG/L) (01065)	DIS-SOLVED STRONTIUM (SR) (UG/L) (01080)	DIS-SOLVED ZINC (ZN) (UG/L) (01090)
AY-68-21-804	77-06-28	0	10	13	8	.0	--	--	1100
AY-68-27-302	75-07-29	2	0	0	0	.0	0	480	390
	76-05-20	3	10	0	40	.2	0	970	560
	77-08-31	3	10	1	0	.0	--	--	320
AY-68-27-303	76-12-28	0	10	2	0	.0	--	--	250
	77-04-06	0	20	2	0	.0	--	--	200
	77-06-27	2	10	1	0	.0	--	--	270
	77-08-11	0	0	2	0	.0	--	--	240
AY-68-27-305	77-06-27	3	10	2	0	.0	--	--	2400
	77-08-11	5	0	3	10	.0	--	--	2100
AY-68-27-503	75-07-28	2	0	0	0	.0	0	430	20
	76-05-20	4	20	0	50	.1	0	440	0
	77-05-17	2	10	0	0	.0	--	--	10
	77-08-30	2	10	1	0	.0	--	--	10
AY-68-27-504	75-07-28	3	0	0	0	.0	0	600	10
	76-05-20	3	30	0	40	.1	0	300	0
	77-05-17	2	0	0	0	.0	--	--	10
	77-08-30	6	10	1	0	.0	--	--	0
AY-68-27-507	75-08-12	5	0	0	0	.1	0	480	210
AY-68-27-508	75-07-29	2	20	1	10	.0	0	410	210
AY-68-27-510	75-07-28	4	0	1	0	.0	0	610	130
AY-68-27-603	75-08-12	13	0	0	0	.0	0	230	100
AY-68-27-605	75-08-12	0	0	0	0	.0	0	300	60
AY-68-27-606	77-06-27	2	20	6	0	.0	--	--	630
AY-68-27-705	75-09-23	7	70	5	10	.1	0	1100	180
AY-68-27-706	75-09-24	10	50	2	10	.0	0	470	220
AY-68-28-202	75-06-30	6	10	0	0	.1	4	230	10
	77-05-25	3	520	1	5	.2	--	--	10
	77-08-25	2	0	0	0	.0	--	--	10
AY-68-28-203	75-06-30	4	10	0	10	.1	0	190	30
	77-05-25	2	10	1	10	.0	--	--	20
	77-08-25	1	0	0	0	.0	--	--	20
AY-68-28-501	76-05-24	5	10	0	0	1.0	0	1200	0
AY-68-28-501	77-05-25	3	20	0	20	.2	--	--	10
	77-08-25	1	30	0	0	.0	--	--	10
AY-68-28-502	75-06-30	6	0	0	0	.1	0	1900	130
	76-05-24	6	10	0	10	.4	0	2500	10
	77-05-25	4	0	1	2	.4	--	--	20
	77-08-25	1	20	0	0	.0	--	--	10
AY-68-28-505	75-07-29	1	0	0	0	.1	0	230	100
AY-68-28-509	76-05-24	0	0	0	0	.1	0	470	0
	77-06-16	1	10	1	0	.0	--	--	0
AY-68-28-511	77-08-31	0	20	1	0	.0	--	--	80
AY-68-28-512	77-09-03	2	30	5	0	.0	--	--	640
AY-68-28-601	75-08-12	6	20	0	0	1.5	0	270	30
AY-68-28-608	77-06-27	1	10	5	0	.0	--	--	470
	77-08-18	1	10	5	0	.0	--	--	500
AY-68-28-903	75-07-29	2	0	1	0	.1	0	360	40
	76-05-25	2	30	0	0	.2	0	440	10
	77-06-28	2	10	1	4	.0	--	--	20
AY-68-29-109	77-06-07	2	20	2	0	.0	--	--	0
AY-68-29-206	75-03-11	1	20	0	10	.1	0	100	120
AY-68-29-208	77-04-21	0	10	10	0	.0	--	--	580
AY-68-29-209	77-04-21	0	90	7	0	.0	--	--	680
AY-68-29-303	75-08-13	1	0	0	10	.0	3	200	20
	76-05-24	0	0	0	0	.3	0	220	0
	77-05-11	0	10	0	0	.0	--	--	5
AY-68-29-401	77-06-07	2	20	1	0	.0	--	--	0
AY-68-29-405	75-08-14	6	0	0	0	.0	0	230	0
	76-05-21	5	0	0	0	.1	0	250	0
	77-06-07	4	20	1	0	.0	--	--	0
AY-68-29-702	75-08-13	1	0	0	10	.0	0	370	20
AY-68-29-805	75-08-14	13	0	0	0	.0	0	520	10
	77-06-07	7	50	1	0	.0	--	--	0
AY-68-30-1[illegible]	75-08-13	0	0	0	0	.0	0	200	0
	77-05-24	1	20	2	0	.0	--	--	0
AY-68-30-1[illegible]	75-08-13	1	0	0	0	.0	0	170	150
AY-68-36-10[illegible]	77-05-16	0	10	1	0	.0	--	--	10
AY-68-37-101	77-06-14	1	10	2	0	.0	--	--	0
AY-68-37-127	77-09-29	0	10	1	0	.0	--	--	10

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DIELDRIN (UG/L) (39380)
AY-68-21-404	77-06-28	1500	279	5.0	60	.00	.00	.00	.00	.00
AY-68-27-302	75-07-29	1350	517	10	60	.00	.00	.00	.00	.00
	77-08-31	1300	517	10	30	.00	.00	.00	.00	.00
AY-68-27-403	77-04-06	1400	350	15	60	.00	.00	.00	.00	.00
AY-68-27-305	77-06-27	1100	253	3.0	60	--	--	--	--	--
AY-68-27-503	77-08-30	1205	435	275	10	.00	.00	.00	.00	.00
AY-68-27-504	75-07-28	1430	508	525	60	.00	.00	.00	.00	.00
	77-08-30	1145	508	525	10	.00	.00	.00	.00	.00
AY-68-27-507	75-08-12	1155	385	9.0	60	.00	.00	.00	.00	.00
AY-68-27-605	75-08-12	1335	305	36	60	.00	.00	.00	.00	.00
AY-68-27-705	75-09-24	1330	--	10	60	.00	.00	.00	.00	.00
AY-68-27-706	75-09-24	1010	410	15	10	.00	.00	.00	.00	.00
AY-68-28-202	75-06-30	1515	457	125	10	.00	.00	.00	.00	.00
	77-08-25	1230	457	125	270	.00	.00	.00	.00	.00
AY-68-29-203	75-06-30	1315	435	350	10	.00	.00	.00	.00	.00
	77-08-25	1135	435	350	240	.00	.00	.00	.00	.00
AY-68-29-501	77-08-25	1300	468	100	300	.00	.00	.00	.00	.00
AY-68-28-502	75-06-30	1610	506	110	10	.00	.00	.00	.00	.00
	77-08-25	1400	506	110	360	.00	.00	.00	.00	.00
AY-68-28-511	77-08-31	1130	--	100	500	.00	.00	.00	.00	.00
AY-68-28-512	77-09-03	1530	400	7.5	60	.00	.00	.00	.00	.00
AY-68-28-601	75-08-12	1005	425	50	75	.00	.00	.00	.00	.00
AY-68-28-608	77-06-27	1430	500	15	60	.00	.00	.00	.00	.00
AY-68-28-903	75-07-29	0820	762	3500	10	.00	.00	.00	.00	.00
AY-68-29-208	77-08-21	1125	266	10	60	.00	.00	.00	.00	.00
AY-68-29-209	77-08-21	1000	315	10	60	.00	.00	.00	.00	.00
AY-68-29-210	77-08-16	1300	330	3.0	60	.00	.00	.00	.00	.00
AY-68-29-303	75-08-13	1000	527	150	180	.00	.00	.00	.00	.00
AY-68-29-702	75-08-13	0910	872	1500	--	.00	.00	.00	.00	.00
AY-68-37-127	77-09-29	1230	407	1000	--	.00	.00	.00	.00	.00
AY-68-37-404	77-08-17	1245	1326	4000	1440	.00	.00	.00	.00	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTACHLOR (UG/L) (39410)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLORDANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DIAZINON (UG/L) (39570)	TOTAL MALATHION (UG/L) (39530)	TOTAL METHYL PARATHION (UG/L) (39600)
AY-68-21-804	77-06-28	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-302	75-07-29	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-31	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-303	77-04-06	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-305	77-06-27	--	--	--	--	--	--	--	--	--
AY-68-27-503	77-08-30	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-504	75-07-28	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-30	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-507	75-08-12	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-605	75-08-12	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-705	75-09-23	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-27-706	75-09-24	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-202	75-06-30	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-25	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-203	75-06-30	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-25	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-501	77-08-25	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-502	75-06-30	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-25	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-511	77-08-31	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-512	77-09-03	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-601	75-08-12	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-608	77-06-27	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-903	75-07-29	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-208	77-08-21	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-209	77-08-21	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-210	77-08-16	.00	.00	.00	.00	.0	.0	.05	.00	.00
AY-68-29-303	75-08-13	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-702	75-08-13	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-37-127	77-09-29	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-37-404	77-08-17	.00	.00	.00	.00	.0	.0	.00	.00	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

BEXAR COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL PARATHION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AY-6A-21-804	77-06-28	.00	.00	.00	.00
AY-6A-27-302	75-07-29	.00	.00	.00	.00
	77-08-31	.00	.00	.00	.00
AY-6A-27-303	77-04-06	.00	.00	.00	.00
AY-6A-27-305	77-06-27	--	.00	.00	.00
AY-6A-27-503	77-08-30	.00	.00	.00	.00
AY-6A-27-504	75-07-28	.00	.00	.00	.00
	77-08-30	.00	.00	.00	.00
AY-6A-27-507	75-08-12	.00	.00	.00	.00
AY-6A-27-605	75-08-12	.00	.00	.00	.00
AY-6A-27-705	75-09-23	.00	.00	.00	.00
AY-6A-27-706	75-09-24	.00	.00	.00	.00
AY-6A-28-202	75-06-30	.00	.00	.00	.00
	77-08-25	.00	.00	.00	.00
AY-6A-28-203	75-06-30	.00	.01	.00	.00
	77-08-25	.00	.00	.00	.00
AY-6A-28-501	77-08-25	.00	.00	.00	.00
AY-6A-28-502	75-06-30	.00	.00	.00	.00
	77-08-25	.00	.00	.00	.00
AY-6A-28-511	77-08-31	.00	.00	.00	.00
AY-6A-28-512	77-09-03	.00	.00	.00	.00
AY-6A-28-601	75-08-12	.00	.00	.00	.00
AY-6A-28-608	77-06-27	.00	.00	.00	.00
AY-6A-28-903	75-07-29	.00	.00	.00	.00
AY-6A-29-208	77-04-21	.00	.00	.00	.00
AY-6A-29-209	77-04-21	.00	.00	.00	.00
AY-6A-29-210	77-08-16	.00	.00	.00	.00
AY-6A-29-303	75-08-13	.00	.00	.00	.00
AY-6A-29-702	75-08-13	.00	.00	.00	.00
AY-6A-37-127	77-09-29	.00	.00	.00	.00
AY-6A-37-404	77-09-17	.00	.00	.00	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

COMAL COUNTY

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
DX-68-15-901	76-01-14	1100	--	--	1/	11	94	16	7.2	1.3
	76-11-10	1345	--	--	2/	10	100	11	6.7	1.2
DX-68-22-901	77-09-01	0945	10	255	250	12	87	11	5.5	1.1
DX-68-23-219	75-09-04	1230	15	320	10	12	97	13	6.6	1.2
DX-68-23-222	75-03-05	1450	--	--	--	11	83	15	6.6	1.0
DX-68-23-301	76-01-14	1000	--	--	3/	12	81	17	8.3	1.3
	76-05-27	1430	--	--	4/	12	75	16	8.7	1.3
	77-05-10	1200	--	--	5/	12	80	17	8.7	1.4
	77-08-26	1130	--	--	6/	13	82	15	9.3	1.3
DX-68-23-303	76-05-27	1400	240	1045	4200	12	75	16	9.5	1.4
	77-05-10	1315	180	1045	4200	12	80	18	9.3	1.5
DX-68-23-601	77-08-26	1010	120	365	2100	12	81	15	8.5	1.2
DX-68-23-602	77-05-10	1345	180	790	2750	11	85	16	7.5	1.2

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
DX-68-15-901	76-01-14	345	0	14	12	.2	--	--	--	326
	76-11-10	335	0	12	9.7	.2	.87	.00	.00	316
DX-68-22-901	77-09-01	300	0	9.1	9.4	.1	2.0	.00	.00	283
DX-68-23-219	75-09-04	340	0	7.6	9.1	.1	2.0	.00	.05	314
DX-68-23-222	75-03-05	291	0	16	12	.3	2.5	.00	.00	288
DX-68-23-301	76-01-14	294	0	20	13	.2	--	--	--	298
	76-05-27	290	0	24	13	.3	.81	.44	.01	294
	77-05-10	287	0	24	13	.2	1.8	.00	.00	298
	77-08-26	290	0	35	15	.2	2.0	.00	.02	314
DX-68-23-303	76-05-27	283	0	30	15	.3	1.6	.03	.00	300
	77-05-10	280	0	32	15	.2	1.7	.00	.00	306
DX-68-23-601	77-08-26	290	0	20	15	.2	--	--	--	296
DX-68-23-602	77-05-10	300	0	20	12	.2	1.9	.07	.00	301

See footnotes at end of table.

TABLE 1.--WATER-QUALITY FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

COMAL COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)
DX-68-15-901	76-01-14	300	18	5	.2	585	6.5	21.5	--
	76-11-10	300	20	5	.2	583	7.2	21.0	48
DX-68-22-901	77-09-01	260	16	4	.1	513	7.4	22.0	0
DX-68-23-219	75-09-04	300	17	5	.2	553	7.2	--	13
DX-68-23-222	75-03-05	270	30	5	.2	524	7.5	22.5	--
DX-68-23-301	76-01-14	270	32	6	.2	532	6.5	23.5	--
	76-05-27	250	16	7	.2	528	7.3	23.5	8
	77-05-10	270	34	7	.2	532	7.3	23.5	0
	77-08-26	270	29	7	.2	528	7.3	23.0	5
DX-68-23-303	76-05-27	250	22	8	.3	532	7.4	24.0	0
	77-05-10	270	44	7	.2	539	7.3	24.0	0
DX-68-23-601	77-08-26	260	26	7	.2	528	7.3	23.5	0
DX-68-23-602	77-05-10	280	32	6	.2	539	7.2	23.0	0

LOCAL IDENTIFIER	DATE OF SAMPLE	FECAL COLIFORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COLONIES PER 100 ML) (31679)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
DX-68-15-901	76-01-14	--	--	--	--
	76-11-10	12	13	1.0	.00
DX-68-22-901	77-09-01	0	0	.3	.10
DX-68-23-219	75-09-04	1	0	2.1	--
DX-68-23-222	75-03-05	0	0	.7	--
DX-68-23-301	76-01-14	--	--	--	--
	76-05-27	0	0	1.9	.00
	77-05-10	0	0	3.5	.00
	77-08-26	2	2	.4	.00
DX-68-23-303	76-05-27	0	0	2.4	.00
	77-05-10	0	0	2.5	.00
DX-68-23-601	77-08-26	0	0	.7	.00
DX-68-23-602	77-05-10	0	0	1.4	.10

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

COMAL COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	DISSOLVED ALUMINUM (AL) (UG/L) (01106)	DISSOLVED ARSENIC (AS) (UG/L) (01000)	DISSOLVED CADMIUM (CD) (UG/L) (01025)	DISSOLVED CHROMIUM (CR) (UG/L) (01030)	DISSOLVED COBALT (CO) (UG/L) (01035)
DX-68-15-901	76-01-14	1100	--	--	--	--	--	--	--	--
	76-11-10	1345	--	--	--	--	0	0	0	--
DX-68-22-901	77-09-01	0945	255	250	10	--	0	0	0	--
DX-68-23-301	76-01-14	1000	--	--	--	--	--	--	--	--
	76-05-27	1430	--	--	--	20	0	0	0	0
	77-05-10	1200	--	--	--	--	0	0	0	--
	77-08-26	1130	--	--	--	--	0	0	0	--
DX-68-23-303	76-05-27	1400	1045	4200	240	20	0	0	0	0
	77-05-10	1315	1045	4200	180	--	0	0	0	--
DX-68-23-601	77-08-26	1010	365	2100	120	--	0	0	0	--
DX-68-23-602	77-05-10	1345	790	2750	180	--	0	0	0	--

LOCAL IDENTIFIER	DATE OF SAMPLE	DISSOLVED COPPER (CU) (UG/L) (01040)	DISSOLVED IRON (FE) (UG/L) (01046)	DISSOLVED LEAD (PB) (UG/L) (01049)	DISSOLVED MANGANESE (MN) (UG/L) (01056)	DISSOLVED MERCURY (HG) (UG/L) (71890)	DISSOLVED NICKEL (NI) (UG/L) (01065)	DISSOLVED STRONTIUM (SR) (UG/L) (01080)	DISSOLVED ZINC (ZN) (UG/L) (01090)
DX-68-15-901	76-01-14	--	--	--	--	--	--	400	--
	76-11-10	3	10	0	6	.0	--	--	20
DX-68-22-901	77-09-01	5	10	1	10	.0	--	--	0
DX-68-23-301	76-01-14	--	--	--	--	--	--	550	--
	76-05-27	0	20	0	10	.1	0	660	0
	77-05-10	0	10	0	0	.0	--	--	10
	77-08-26	0	10	0	0	.0	--	--	0
DX-68-23-303	76-05-27	4	0	0	20	.1	0	780	0
	77-05-10	1	10	0	0	.0	--	--	10
DX-68-23-601	77-08-26	1	0	1	0	.0	--	--	10
DX-68-23-602	77-05-10	1	0	1	0	.0	--	--	0

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

COMAL COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DIELDRIN (UG/L) (39380)
DX-68-22-901	77-09-01	0945	255	250	10	.00	.00	.00	.00	.00
DX-68-23-301	77-05-10	1200	--	--	--	.00	.00	.00	.00	.00
	77-08-26	1130	--	--	--	.00	.00	.00	.00	.00
DX-68-23-601	77-08-26	1010	365	2100	120	.00	.00	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTACHLOR (UG/L) (39410)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLORDANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DIAZINON (UG/L) (39570)	TOTAL MALATHION (UG/L) (39530)	TOTAL METHYL PARATHION (UG/L) (39600)
DX-68-22-901	77-09-01	.00	.00	.00	.00	.0	.0	.00	.00	.00
DX-68-23-301	77-05-10	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-08-26	.00	.00	.00	.00	.0	.0	.00	.00	.00
DX-68-23-601	77-08-26	.00	.00	.00	.00	.0	.0	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL PARATHION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
DX-68-22-901	77-09-01	.00	.00	.00	.00
DX-68-23-301	77-05-10	.00	.00	.00	.00
	77-08-26	.00	.00	.00	.00
DX-68-23-601	77-08-26	.00	.00	.00	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

HAYS COUNTY

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
LR-58-58-403	77-05-04	1100	150	390	800	10	76	26	5.7	1.2
LR-67-01-302	77-05-04	1340	60	360	800	--	--	--	--	--
LR-67-01-801	76-05-27	1230	--	7/	--	11	81	18	11	1.5
	77-05-09	1130	--	8/	--	10	90	19	11	1.7
	77-09-02	1130	--	9/	--	11	87	18	10	1.5
LR-67-01-806	76-05-27	1130	15	128	2700	12	87	16	11	1.3
	77-05-09	1100	240	128	2700	12	92	17	10	1.3
LR-67-09-111	77-09-02	1330	300	--	1000	13	92	16	9.6	1.3
LR-67-09-105	77-05-09	1410	--	330	1500	12	94	18	13	1.5

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
LR-58-58-403	77-05-04	324	0	30	10	.6	1.6	.01	.00	319
LR-67-01-302	77-05-04	--	--	--	--	--	.06	.02	.00	--
LR-67-01-801	76-05-27	316	0	23	19	.3	1.4	.00	.00	321
	77-05-09	325	0	25	19	.2	1.5	.05	.00	336
	77-09-02	320	0	22	20	.2	1.4	.00	.00	328
LR-67-01-806	76-05-27	322	0	24	19	.2	1.9	.02	.00	330
	77-05-09	322	0	25	18	.2	1.9	.00	.00	334
LR-67-09-111	77-09-02	320	0	20	16	.2	1.8	.00	.00	326
LR-67-09-105	77-05-09	316	0	31	22	.2	1.6	.00	.00	348

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NONCARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)
LR-58-58-403	77-05-04	300	31	4	.1	590	7.4	22.0	--
LR-67-01-302	77-05-04	--	--	--	--	--	--	25.0	--
LR-67-01-801	76-05-27	280	18	8	.3	583	7.3	21.5	8
	77-05-09	308	36	7	.3	611	7.2	21.5	1
	77-09-02	290	29	7	.3	578	7.2	21.5	2
LR-67-01-806	76-05-27	280	20	8	.3	595	7.4	22.5	0
	77-05-09	300	36	7	.3	608	7.3	22.5	0
LR-67-09-111	77-09-02	300	33	7	.2	577	7.3	23.0	0
LR-67-09-105	77-05-09	310	50	8	.3	622	7.2	23.0	0

LOCAL IDENTIFIER	DATE OF SAMPLE	FECAL COLIFORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COLONIES PER 100 ML) (31679)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
LR-58-58-403	77-05-04	--	--	3.1	.10
LR-67-01-302	77-05-04	--	--	.5	.00
LR-67-01-801	76-05-27	0	3	6.0	.00
	77-05-09	0	2	3.9	.00
	77-09-02	--	--	2.6	.10
LR-67-01-806	76-05-27	0	0	1.2	.00
	77-05-09	0	0	.7	.00
LR-67-09-111	77-09-02	--	--	.3	.10
LR-67-09-105	77-05-09	0	0	.3	.00

See footnotes at end of table.

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

HAYS COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	DISSOLVED ALUMINUM (AL) (UG/L) (01106)	DISSOLVED ARSENIC (AS) (UG/L) (01000)	DISSOLVED CADMIUM (CD) (UG/L) (01025)	DISSOLVED CHROMIUM (CR) (UG/L) (01030)	DISSOLVED COBALT (CO) (UG/L) (01035)
LR-58-58-403	77-05-04	1100	390	800	150	--	0	0	0	--
LR-67-01-801	76-05-27	1230	--	--	--	10	0	0	0	0
	77-05-09	1130	--	--	--	--	0	0	0	--
	77-09-02	1130	--	--	--	--	0	0	0	--
LR-67-01-806	76-05-27	1130	128	2700	15	20	0	0	0	0
	77-05-09	1100	128	2700	240	--	0	0	10	--
LR-67-09-111	77-09-02	1330	--	1000	300	--	0	0	0	--
LR-67-09-105	77-05-09	1410	330	1500	--	--	0	0	0	--

LOCAL IDENTIFIER	DATE OF SAMPLE	DISSOLVED COPPER (CU) (UG/L) (01040)	DISSOLVED IRON (FE) (UG/L) (01046)	DISSOLVED LEAD (PB) (UG/L) (01049)	DISSOLVED MANGANESE (MN) (UG/L) (01056)	DISSOLVED MERCURY (HG) (UG/L) (71890)	DISSOLVED NICKEL (NI) (UG/L) (01065)	DISSOLVED STRONTIUM (SR) (UG/L) (01080)	DISSOLVED ZINC (ZN) (UG/L) (01090)
LR-58-58-403	77-05-04	2	10	1	4	.0	--	--	10
LR-67-01-801	76-05-27	0	30	0	10	.1	0	620	0
	77-05-09	0	10	1	0	.0	--	--	10
	77-09-02	0	10	1	0	.0	--	--	0
LR-67-01-806	76-05-27	0	380	0	10	.1	0	620	10
	77-05-09	1	10	0	0	.0	--	--	0
LR-67-09-111	77-09-02	2	10	1	10	.0	--	--	0
LR-67-09-105	77-05-09	1	0	0	0	.0	--	--	10

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DIELDRIN (UG/L) (39380)
LR-58-58-403	77-05-04	1100	390	800	150	.00	.00	.00	.00	.00
LR-67-01-801	77-05-09	1130	--	--	--	.00	.00	.00	.00	.00
	77-09-02	1130	--	--	--	.00	.00	.00	.00	.00
LR-67-09-111	77-09-02	1330	--	1000	300	.00	.00	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTACHLOR (UG/L) (39410)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLORDANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DIAZINON (UG/L) (39570)	TOTAL MALATHION (UG/L) (39530)	TOTAL METHYL PARATHION (UG/L) (39600)
LR-58-58-403	77-05-04	.00	.00	.00	.00	.0	.0	.00	.00	.00
LR-67-01-801	77-05-09	.00	.00	.00	.00	.0	.0	.00	.00	.00
	77-09-02	.00	.00	.00	.00	.0	.0	.00	.00	.00
LR-67-09-111	77-09-02	.00	.00	.00	.00	.0	.0	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL PARATHION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
LR-58-58-403	77-05-04	.00	.00	.00	.00
LR-67-01-801	77-05-09	.00	.00	.00	.00
	77-09-02	.00	.00	.00	.00
LR-67-09-111	77-09-02	.00	.00	.00	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

MEDINA COUNTY

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
TD-68-26-701	77-06-21	1500	480	750	1000	13	77	20	7.4	1.3
TD-68-34-401	77-06-20	1100	240	705	1700	11	66	19	8.2	1.4
TD-68-41-303	77-06-20	0945	15	717	350	12	68	15	8.2	1.1
TD-69-29-901	76-11-09	1220	10	276	20	14	110	10	10	1.1
TD-69-37-302	75-12-13	1230	15	410	20	13	82	14	7.7	1.1
TD-69-37-302	76-11-09	1145	10	410	20	14	98	9.9	9.3	1.0
TD-69-38-601	75-06-05	1300	180	538	10	11	73	12	6.5	.8
TD-69-39-506	77-06-22	1400	420	654	1100	11	79	12	8.0	1.3
TD-69-39-801	75-06-05	0930	1440	863	1200	11	72	11	5.3	1.0
TD-69-40-403	77-06-21	1145	1440	518	1800	13	77	9.2	5.0	.9
TD-69-40-602	77-06-21	1345	330	1163	2000	13	84	10	6.6	1.1
TD-69-46-601	77-06-21	0930	120	1289	350	13	69	15	7.3	1.1
TD-69-47-303	77-06-21	1100	20	1803	1150	13	69	16	7.4	1.1
TD-69-48-202	75-05-29	1500	--	1717	1200	13	56	19	8.8	1.1

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
TD-68-26-701	77-06-21	250	0	52	12	.3	1.1	.01	.03	306
TD-68-34-401	77-06-20	230	0	50	17	.3	.30	.01	.02	286
TD-68-41-303	77-06-20	250	0	17	18	.2	1.1	.01	.02	263
TD-69-29-901	76-11-09	293	0	19	53	.2	6.9	.00	.00	362
TD-69-37-302	75-12-13	276	0	21	13	.2	1.6	.00	.01	288
TD-69-37-302	76-11-09	298	0	21	13	.2	2.0	.01	.01	313
TD-69-38-601	75-06-05	239	0	18	11	.1	--	--	--	257
TD-69-39-506	77-06-22	250	0	16	13	.1	5.8	.06	.02	264
TD-69-39-801	75-06-05	243	0	13	9.4	.2	--	--	--	243
TD-69-40-403	77-06-21	260	0	10	8.5	.1	.92	.01	.03	252
TD-69-40-602	77-06-21	260	0	23	11	.1	.95	.01	.03	277
TD-69-46-601	77-06-21	250	0	18	12	.2	1.6	.00	.03	259
TD-69-47-303	77-06-21	250	0	19	14	.2	1.5	.01	.02	263
TD-69-48-202	75-05-29	240	0	19	13	.5	--	--	--	256

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

MEDINA COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NONCARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)
TD-68-26-701	77-06-21	270	70	6	.2	522	7.2	23.0
TD-68-34-401	77-06-20	240	54	7	.2	495	7.5	22.0
TD-68-41-303	77-06-20	230	27	7	.2	469	7.3	23.0
TD-69-29-901	76-11-09	320	76	6	.2	612	7.4	21.5
TD-69-37-302	75-12-13	260	34	6	.2	521	7.3	22.2
TD-69-37-302	76-11-09	290	41	7	.2	546	7.4	21.5
TD-69-38-601	75-06-05	230	36	6	.2	436	6.8	--
TD-69-39-506	77-06-22	250	42	7	.2	486	7.3	23.0
TD-69-39-801	75-06-05	230	26	5	.2	428	7.5	23.0
TD-69-40-403	77-06-21	230	17	5	.1	448	7.2	23.0
TD-69-40-602	77-06-21	250	38	5	.2	486	7.1	23.0
TD-69-46-601	77-06-21	230	29	6	.2	461	7.2	24.0
TD-69-47-303	77-06-21	240	33	6	.2	456	7.3	24.5
TD-69-48-202	75-05-29	220	25	8	.3	435	6.8	28.5

LOCAL IDENTIFIER	DATE OF SAMPLE	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
TD-68-26-701	77-06-21	--	0	2.5	.00
TD-68-34-401	77-06-20	--	0	.4	.00
TD-68-41-303	77-06-20	--	0	.2	.00
TD-69-29-901	76-11-09	--	--	--	--
TD-69-37-302	75-12-13	--	--	1.0	--
TD-69-37-302	76-11-09	--	--	--	--
TD-69-38-601	75-06-05	--	--	--	--
TD-69-39-506	77-06-22	--	0	1.4	.10
TD-69-39-801	75-06-05	--	--	--	--
TD-69-40-403	77-06-21	--	0	.8	--
TD-69-40-602	77-06-21	--	0	1.3	.00
TD-69-46-601	77-06-21	--	0	2.5	.00
TD-69-47-303	77-06-21	--	0	2.8	.00
TD-69-48-202	75-05-29	--	--	--	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO COUNTY--CONTINUED

MEDINA COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	DISSOLVED ALUMINUM (AL) (UG/L) (01106)	DISSOLVED ARSENIC (AS) (UG/L) (01000)	DISSOLVED CADMIUM (CD) (UG/L) (01025)	DISSOLVED CHROMIUM (CR) (UG/L) (01030)	DISSOLVED COBALT (CO) (UG/L) (01035)
TD-68-26-701	77-06-21	1500	750	1000	480	--	0	0	0	--
TD-68-34-401	77-06-20	1100	705	1700	240	--	0	0	10	--
TD-68-41-303	77-06-20	0945	717	350	15	--	0	0	0	--
TD-69-37-302	75-12-13	1230	410	20	15	0	0	0	0	0
TD-69-38-601	75-06-05	1300	538	10	180	--	--	--	--	--
TD-69-39-506	77-06-22	1440	654	1100	420	--	0	0	0	--
TD-69-40-403	77-06-21	1145	518	1800	1440	--	0	0	10	--
TD-69-40-602	77-06-21	1345	1163	2000	330	--	0	0	0	--
TD-69-46-601	77-06-21	0930	1289	350	120	--	0	0	0	--
TD-69-47-303	77-06-21	1100	1803	1150	20	--	0	0	0	--
TD-69-48-202	75-05-29	1500	1717	1200	--	--	--	--	--	--

LOCAL IDENTIFIER	DATE OF SAMPLE	DISSOLVED COPPER (CU) (UG/L) (01040)	DISSOLVED IRON (FE) (UG/L) (01046)	DISSOLVED LEAD (PB) (UG/L) (01049)	DISSOLVED MANGANESE (MN) (UG/L) (01056)	DISSOLVED MERCURY (HG) (UG/L) (71890)	DISSOLVED NICKEL (NI) (UG/L) (01065)	DISSOLVED STRONTIUM (SR) (UG/L) (01080)	DISSOLVED ZINC (ZN) (UG/L) (01090)
TD-68-26-701	77-06-21	0	20	2	0	.0	--	--	0
TD-68-34-401	77-06-20	0	10	0	0	.0	--	--	0
TD-68-41-303	77-06-20	2	10	2	0	.0	--	--	0
TD-69-37-302	75-12-13	16	10	0	0	.0	0	380	10
TD-69-38-601	75-06-05	--	20	--	--	--	--	260	--
TD-69-39-506	77-06-22	1	10	0	0	.0	--	--	2
TD-69-40-403	77-06-21	0	10	2	0	.0	--	--	0
TD-69-40-602	77-06-21	2	10	2	0	.0	--	--	0
TD-69-46-601	77-06-21	1	10	2	0	.0	--	--	0
TD-69-47-303	77-06-21	2	10	1	0	.0	--	--	30
TD-69-48-202	75-05-29	--	150	--	--	--	--	3400	--

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

UVALDE COUNTY

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	DISSOLVED SILICA (SIO2) (MG/L) (00955)	DISSOLVED CALCIUM (CA) (MG/L) (00915)	DISSOLVED MAGNESIUM (MG) (MG/L) (00925)	DISSOLVED SODIUM (NA) (MG/L) (00930)	DISSOLVED POTASSIUM (K) (MG/L) (00935)
YP-69-36-501	77-06-29	1200	30	500	857	12	77	13	7.9	1.0
YP-69-41-504	77-06-30	1500	30	485	1000	11	62	11	10	1.0
YP-69-42-803	77-06-30	1800	480	540	1500	12	69	4.9	7.6	1.0
YP-69-44-502	77-06-29	1300	240	1380	1500	12	73	15	11	1.1
YP-69-45-404	77-06-30	1430	15	1493	250	12	72	16	11	1.4
YP-69-50-203	77-06-29	1645	30	525	1400	12	88	10	14	1.0
YP-69-50-506	77-06-29	1730	30	525	480	12	98	8.3	19	1.1

LOCAL IDENTIFIER	DATE OF SAMPLE	BICARBONATE (HCO3) (MG/L) (00440)	CARBONATE (CO3) (MG/L) (00445)	DISSOLVED SULFATE (SO4) (MG/L) (00945)	DISSOLVED CHLORIDE (CL) (MG/L) (00940)	DISSOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
YP-69-36-501	77-06-29	270	0	23	15	.1	2.3	.05	.02	282
YP-69-41-504	77-06-30	220	0	12	18	.1	2.2	.01	.02	234
YP-69-42-803	77-06-30	240	0	7.6	15	.1	2.5	.05	.02	236
YP-69-44-502	77-06-29	240	0	21	34	.4	1.8	.06	.02	286
YP-69-45-404	77-06-30	250	0	28	18	.2	2.2	.02	.03	282
YP-69-50-203	77-06-29	260	0	19	42	.1	2.9	.01	.02	314
YP-69-50-506	77-06-29	260	0	23	42	.1	3.8	.03	.02	332

LOCAL IDENTIFIER	DATE OF SAMPLE	HARDNESS (CA,MG) (MG/L) (00900)	NONCARBONATE HARDNESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM ADSORPTION RATIO (00931)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)
YP-69-36-501	77-06-29	250	24	7	.2	537	7.3	22.5	0
YP-69-41-504	77-06-30	200	20	10	.3	386	7.3	22.5	0
YP-69-42-803	77-06-30	190	0	8	.2	446	7.3	23.0	0
YP-69-44-502	77-06-29	240	47	9	.3	530	7.4	--	0
YP-69-45-404	77-06-30	250	41	9	.3	515	7.4	23.0	0
YP-69-50-203	77-06-29	260	48	10	.4	550	7.3	23.0	0
YP-69-50-506	77-06-29	280	66	13	.5	587	7.5	23.5	0

LOCAL IDENTIFIER	DATE OF SAMPLE	FECAL COLIFORM 7UM-MF (COL./100 ML) (31625)	FECAL STREPTOCOCCI KF AGAR (COL. PER 100 ML) (31673)	DISSOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)
YP-69-36-501	77-06-29	0	0	<.0	.00
YP-69-41-504	77-06-30	0	0	1.5	.00
YP-69-42-803	77-06-30	0	0	<.0	.00
YP-69-44-502	77-06-29	0	0	1.0	.00
YP-69-45-404	77-06-30	0	0	<.0	.00
YP-69-50-203	77-06-29	0	0	<.0	.00
YP-69-50-506	77-06-29	0	0	.0	.00

TABLE 1.--WATER-QUALITY DATA FOR WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

UVALDE COUNTY--CONTINUED

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	DISSOLVED ARSENIC (AS) (UG/L) (01000)	DISSOLVED CADMIUM (CD) (UG/L) (01025)	DISSOLVED CHROMIUM (CR) (UG/L) (01030)	DISSOLVED COPPER (CU) (UG/L) (01040)	DISSOLVED IRON (FE) (UG/L) (01046)
YP-69-36-501	77-06-29	1200	500	837	30	0	0	0	0	10
YP-69-41-504	77-06-30	1500	485	1000	30	1	0	0	0	10
YP-69-42-803	77-06-30	1800	540	1500	480	1	0	0	0	10
YP-69-44-502	77-06-29	1300	1380	1500	240	1	0	10	1	10
YP-69-45-404	77-06-30	1430	1493	250	15	0	0	0	5	10
YP-69-50-203	77-06-29	1645	525	1400	30	0	0	0	1	10
YP-69-50-506	77-06-29	1730	525	480	30	1	0	0	1	10

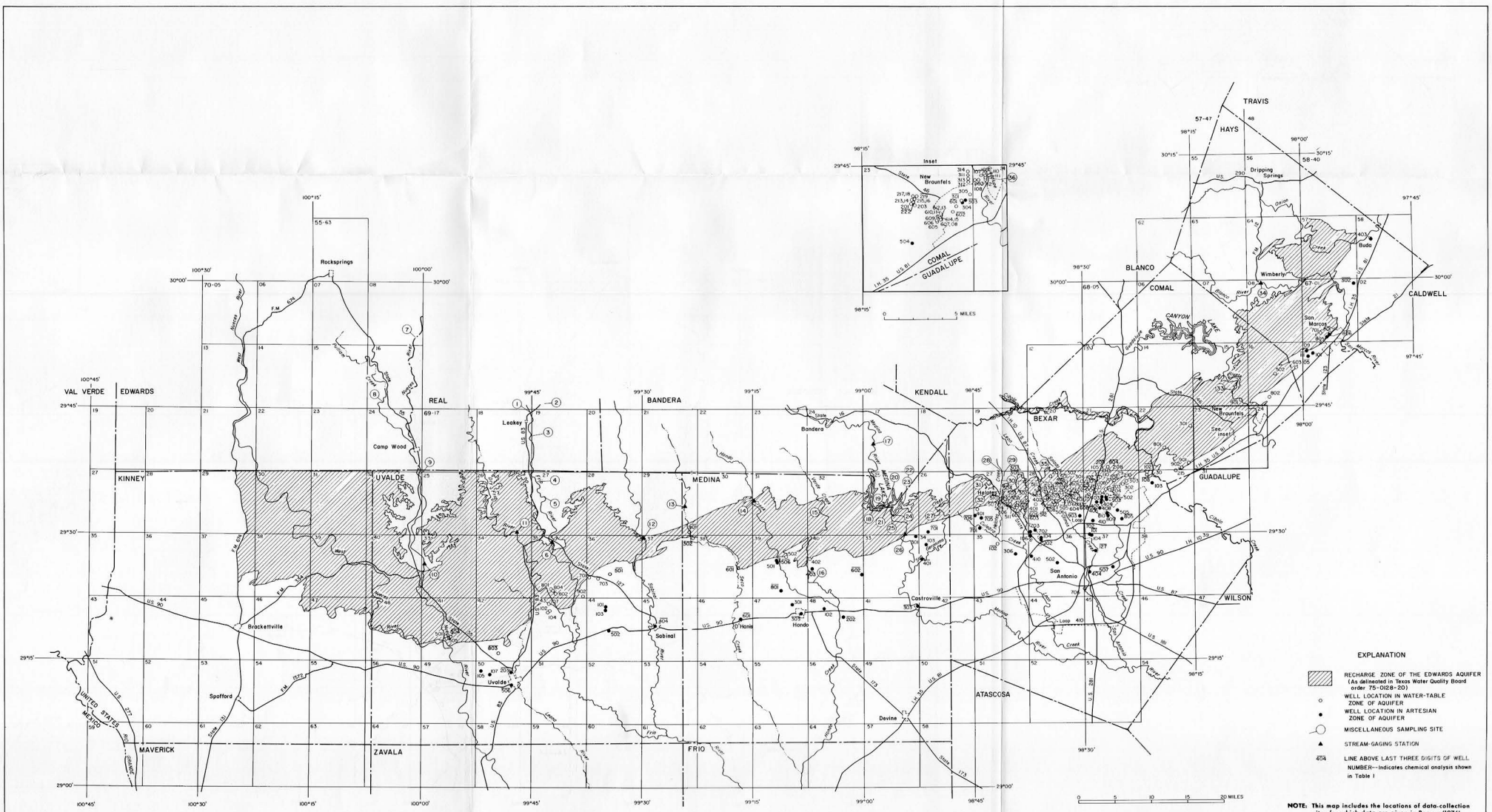
LOCAL IDENTIFIER	DATE OF SAMPLE	DISSOLVED LEAD (PB) (UG/L) (01049)	DISSOLVED MANGANESE (MN) (UG/L) (01056)	DISSOLVED MERCURY (HG) (UG/L) (71890)	DISSOLVED ZINC (ZN) (UG/L) (01090)
YP-69-36-501	77-06-29	0	4	.0	10
YP-69-41-504	77-06-30	0	0	.0	0
YP-69-42-803	77-06-30	0	4	.0	0
YP-69-44-502	77-06-29	1	4	.0	10
YP-69-45-404	77-06-30	1	4	.0	6
YP-69-50-203	77-06-29	0	8	.0	0
YP-69-50-506	77-06-29	1	4	.0	0

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTANTANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAMPLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DIELDRIN (UG/L) (39380)
YP-69-36-501	77-06-29	1200	500	837	30	.00	.00	.00	.00	.00
YP-69-41-504	77-06-30	1500	485	1000	30	.00	.00	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTACHLOR (UG/L) (39410)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLORDANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DIAZINON (UG/L) (39570)	TOTAL MALATHION (UG/L) (39530)	TOTAL METHYL PARATHION (UG/L) (39600)
YP-69-36-501	77-06-29	.00	.00	.00	.00	.0	.0	.00	.00	.00
YP-69-41-504	77-06-30	.00	.00	.00	.00	.0	.0	.00	.00	.00

LOCAL IDENTIFIER	DATE OF SAMPLE	TOTAL PARATHION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
YP-69-36-501	77-06-29	.00	.00	.00	.00
YP-69-41-504	77-06-30	.00	.00	.00	.00

1/ Sample collected at one of many spring discharge points. Flow for spring was 10 cubic feet per second.
2/ Sample collected at one of many spring discharge points. Flow for spring was 30 cubic feet per second.
3/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 350 cubic feet per second.
4/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 451 cubic feet per second.
5/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 446 cubic feet per second.
6/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 335 cubic feet per second.
7/ Sample collected at one of many spring discharge points. Flow for spring was 227 cubic feet per second.
8/ Sample collected at one of many spring discharge points. Flow for spring was 277 cubic feet per second.
9/ Sample collected at one of many spring discharge points. Flow for spring was 186 cubic feet per second.



Base from U.S. Geological Survey
1:250,000 quadrangles

FIGURE 1.- Locations of water-quality data-collection sites

Note: Large-format version of the original plate is on the following page.

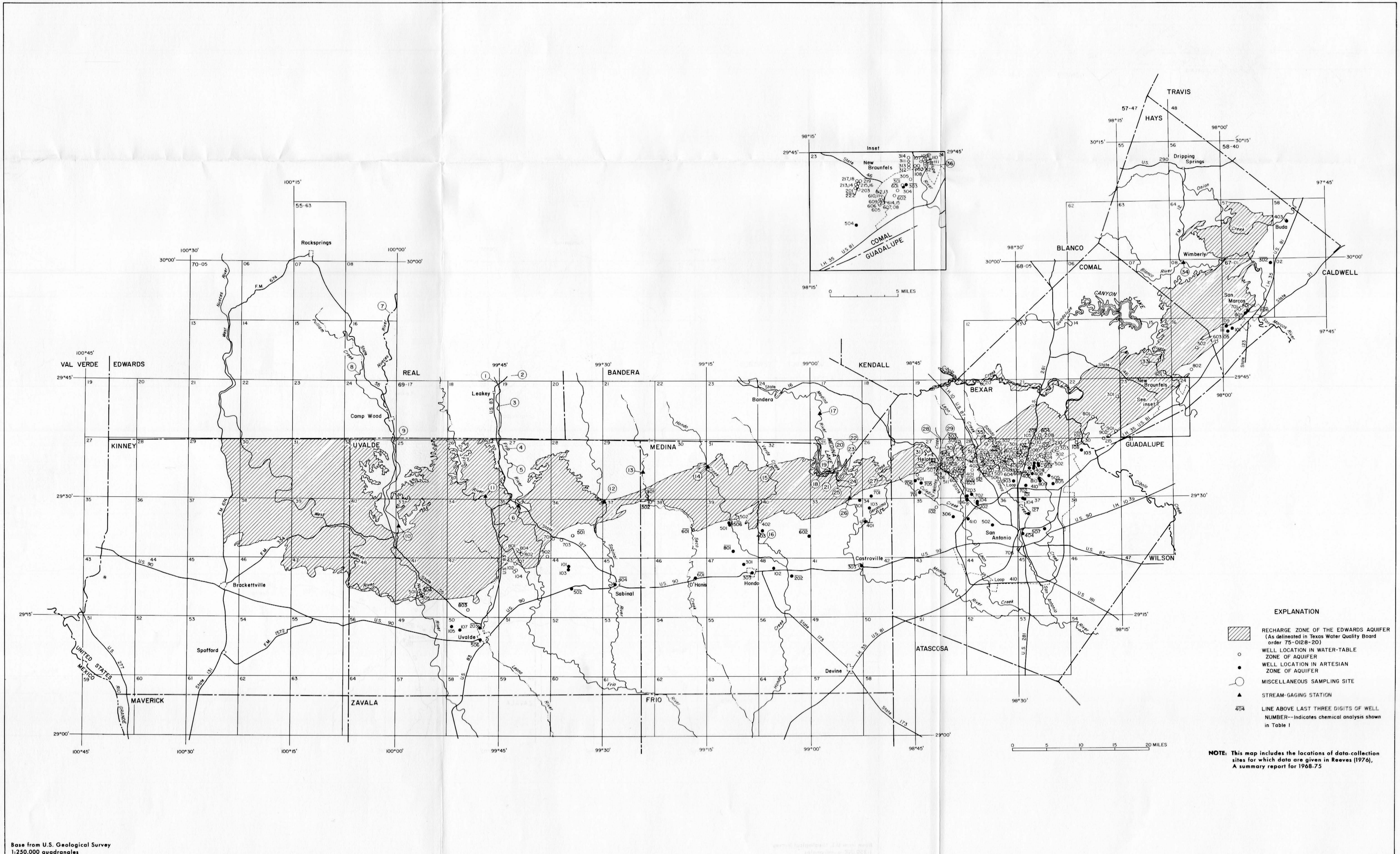


FIGURE 1.- Locations of water-quality data-collection sites