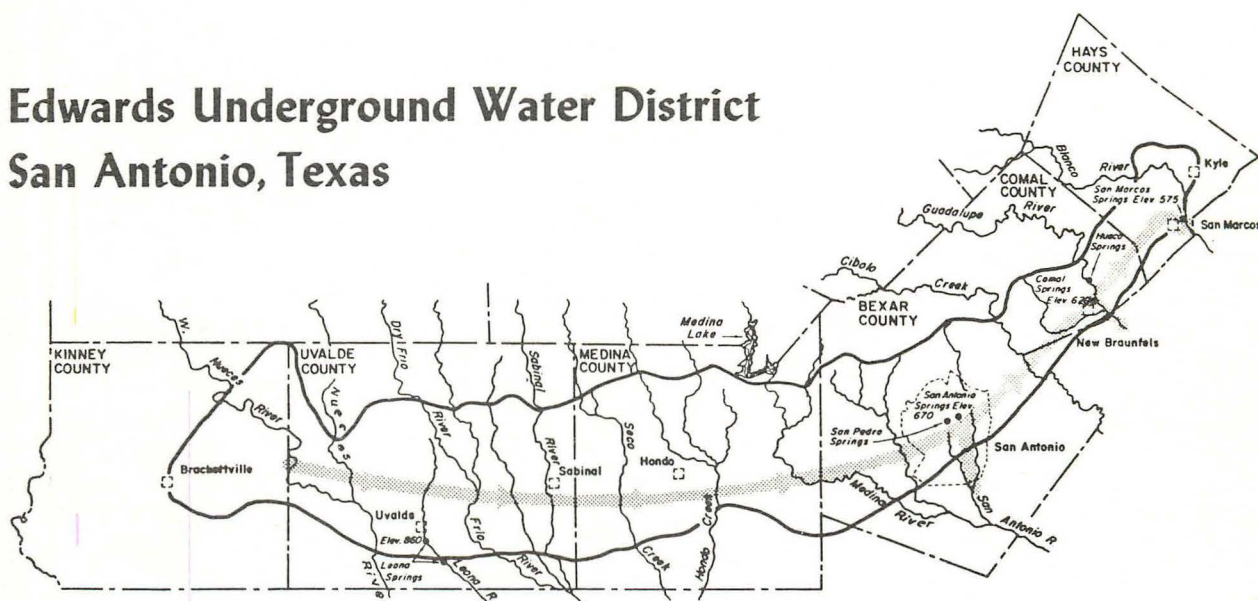


Chemical and Bacteriological Quality of Water at Selected Sites in the San Antonio Area, Texas August 1968 - January 1975

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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By

R. D. Reeves
U.S. Geological Survey

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ABSTRACT

Water samples collected from 161 wells and 3 springs in the Edwards aquifer and at 36 sites on streams that cross the recharge zone of the 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; pesticides; and several other properties or constituents. None of the concentrations of major inorganic constituents, minor elements, or pesticides exceeded the U.S. Environmental Protection Agency's "maximum contaminant levels" for public water systems or "maximum acceptable limits" for raw water used for drinking-water supplies.

The concentrations of dissolved solids in samples from wells and springs ranged from about 200 to 527 mg/l (milligrams per litre) and the dissolved chloride and dissolved sulfate concentrations ranged from 3.7 to 130 mg/l and from 0.0 to 83 mg/l, respectively. The total nitrite plus nitrate nitrogen and total phosphorus concentrations in the ground water ranged from 0.00 to 5.5 mg/l and from 0.00 to 0.12 mg/l. The water is very hard (greater than 180 mg/l as calcium carbonate) and is of the calcium bicarbonate type.

The recharge zone or water-table part of the aquifer is characterized by areas of thin soils or bare rock, and the aquifer is susceptible to contamination in these areas. The presence of fecal coliform and fecal streptococci bacteria, the variations in the number of total coliform bacteria, and the concentrations of total nitrite plus nitrate nitrogen and total phosphorus in samples from some wells in the water-table part of the aquifer show that contamination can and does occur. However, the data indicate that such contamination at the present time (1976) is very localized, and is small in comparison to the volume of water available for dispersion and dilution.

In the artesian zone of the reservoir, samples from improperly constructed wells have contained coliform bacteria; but samples collected from properly constructed and sealed wells were free of coliform bacteria.

There is no evidence of significant degradation of water quality throughout most of the ground-water reservoir, but the data collected during this study indicate that the nearly unrestricted movement of liquids from the surface to the aquifer in the recharge zone presents an ever-present hazard if surface spills of toxic substances should occur. In addition, the many poorly-constructed wells in the artesian part of the aquifer could allow toxic substances to enter the aquifer.

INTRODUCTION

Purpose of this Report

The Edwards aquifer, which has been designated by the U.S. Environmental Protection Agency as the sole source of drinking water for the city of San Antonio, is the principal source of water in the San Antonio area for municipal supply, industrial use, and irrigation. Geologic and hydrologic investigations of the Edwards aquifer have been carried on for many years by the U.S. Geological Survey in cooperation with the Texas Water Development Board, the Edwards Underground Water District, and other agencies. As part of these investigations, a considerable amount of data on the inorganic chemical quality of water in the aquifer have been collected.

In recent years, urban growth in or adjacent to the recharge area has caused increasing concern about the possibility of ground-water pollution. In 1968, the Geological Survey, in cooperation with the Edwards Underground Water District and the Texas Water Development Board, began a continuing program to collect historical-reference data for detecting pollution and for determining changes in the quality of water in the 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 purpose of this report is to provide a compilation of water-quality data collected from August 1968 to January 1975 and to evaluate the results of the study from its outset. Additional progress reports will be published when sufficient data have been collected.

Location of the San Antonio Area and
Description of the Edwards Aquifer System

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).

The Edwards aquifer system is composed of the Edwards Limestone and associated limestones of Cretaceous age. In the recharge zone, the water is under water-table conditions; but in most of the area south of the recharge zone, the water is confined under artesian pressure. The formations dip generally toward the southeast at an angle steeper than the slope of the land surface; consequently, the older formations crop out in the northern part of the area and are overlain by the younger formations to the south. Secondary solution along fractures and bedding planes has created a system of interconnected channels and fissures.

Recharge, Movement, and Discharge of Ground Water

Recharge to the Edwards aquifer occurs primarily by infiltration of surface water from streams that flow across the aquifer and to a lesser extent by direct infiltration of rainfall on the outcrop. Although the magnitude of the recharge from these sources varies for different periods, runoff data for 1954-74 from gaging stations on the major streams indicate that approximately 75 percent of the water available for recharge is derived from the drainage area above the recharge zone. About 70 to 80 percent of the recharge is estimated to enter the aquifer by infiltration through solution-enlarged fractures and bedding planes along stream channels. The estimated average annual recharge for the Edwards aquifer for 1934-73 was about 560,000 acre-feet (690 cubic hectometres). About 370,000 acre-feet (456 cubic hectometres) or 66 percent was recharged in the area west of Bexar County.

In the recharge zone of the aquifer, water-table conditions prevail and the water moves generally toward the south and southeast under steep hydraulic gradients toward the artesian part of the aquifer. In the artesian part of the aquifer, the water moves under relatively low hydraulic gradients toward the east in the areas west of Bexar County and toward the northeast in Bexar and Comal Counties, roughly parallel to the main fault systems. According to Pearson, Rettman, and Wyerman (1975, p. 20-24), water recharged to the aquifer west of Bexar County moves through the artesian part of the aquifer in Bexar County towards Comal Springs (DX-68-23-301) and San Marcos Springs (LR-67-01-801), which are the principal natural-discharge points of the aquifer. The water recharged in northern Bexar and Comal Counties does not mix with water entering the aquifer farther west, but flows to the east in a separate subsystem and discharges in part at Hueco Springs (DX-68-15-901) but primarily at San Marcos Springs.

Methods of Investigation

Because the greatest threat of pollution occurs where wastes are released by design or by accident in the recharge zone or into streams that flow across the recharge zone, most of the wells and springs selected for sampling are located in or near the recharge zone in the water-table part of the aquifer in Bexar and Comal Counties. This is also the area in which the greatest amount of urban development is taking place. Any deterioration in water quality that results from urban development should be detectable in samples from the selected wells and springs in these areas.

Although sampling has been concentrated in the water-table part of the aquifer, wells and springs in the artesian zone were sampled to provide background information on water quality and to determine if contaminants entering the aquifer in the recharge zone are causing deterioration of the water quality in other areas. Streams that cross the recharge zone were sampled to provide information on the quality of the recharge. The locations of 161 wells, 3 springs, and 36 sites on streams that were sampled during the study are shown on figure 1.

The main potential sources of contaminants that could affect the quality of water in the Edwards aquifer are: (1) Effluent from septic tanks and sewage treatment plants; (2) leakage from sewage-collection systems; (3) leakage of industrial wastes; (4) infiltration from sanitary landfills and feedlots; and (5) runoff from subdivisions where toxic chemicals may be used in domestic or commercial activities.

Selected samples have been analyzed for more than 50 properties or constituents, most of which affect the suitability of the water for domestic use or might be indicative of pollution. Some of these constituents that are frequently indicative of pollution are total coliform bacteria, fecal coliform bacteria, fecal streptococci bacteria, nitrogen species (ammonia, nitrite, and nitrate), phosphorus, and MBAS (methylene blue active substances).

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible pollution from sewage disposal. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose within 48 hours at 35°C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C $\pm$ 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml (millilitres) of sample.

The coliform group of bacteria has been used as an indicator of the sanitary quality of water since 1880, when Escherichia Coli (E. Coli) and similar organisms were shown to be normal inhabitants of fecal discharges. This group includes organisms that vary in their natural sources and habitats, but all of the subgroups are normally found in the feces of warm-blooded animals and in water polluted by feces. Some subgroups have a wide environmental distribution and commonly are present on vegetation and in the soil (U.S. Public Health Service, 1962, p. 14-15). A positive test for total coliform bacteria in untreated water is indicative rather than specific for the presence of fecal pollution. The major limitation to the total coliform bacteria index is the uncertain correlation with the occurrence of pathogenic micro-organisms (National Academy of Sciences, National Academy of Engineering, 1973, p. 58).

Fecal coliform bacteria, which are often used as indicators of the sanitary quality of the water, are present in the intestines or feces of warm-blooded animals. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium. Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria occurrences in water reflect the presence of fecal contamination, which is also the most likely source of pathogenic micro-organisms (National Academy of Sciences, National Academy of Engineering, 1973, p. 58). Because no satisfactory method is available for differentiating between fecal organisms of human and animal origin, it is necessary to consider the presence of all fecal organisms in water as an indication of recent and possibly dangerous fecal pollution.

Fecal streptococcal bacteria also occur in the intestines of warm-blooded animals, and their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-Endo medium. Their concentrations are expressed as the number of colonies per 100 ml of sample.

According to Geldreich and Kenner (1969, p. 340), the presence of fecal streptococci bacteria in streams usually indicates fecal pollution, and their absence suggests little or no warm-blooded animal pollution. However, Geldreich and Kenner (1969, p. 348) caution that two varieties of fecal streptococci bacteria are of limited sanitary significance because of their wide environmental distribution. According to the National Technical Advisory Committee to the Secretary of the Interior (National Academy of Sciences, National Academy of Engineering, 1973, p. 12), fecal streptococci bacteria determinations should not be used as primary criteria for evaluating the sanitary quality of water, but such determinations are useful as a supplement to the fecal-coliform bacteria test when a more precise determination of the sources of contamination is necessary.

Phosphorus and nitrogen compounds, which are always present in sewage, are components of the metabolic wastes of animals. The use of sodium phosphate in household detergents probably has caused a significant increase in the amount of phosphorus in domestic wastes in recent years, and nitrogen and phosphorus compounds are common in many industrial wastes. While phosphorus and nitrogen are abundant in most polluted waters, they also occur naturally in water as a result of the leaching of soil and rocks and the decomposition of plants. Fertilizers may also add to the concentrations of phosphorus and nitrogen in water. The presence of these constituents in water is, therefore, indicative rather than specific for pollution.

The determination of methylene blue active substance (MBAS) depends on the formation of a blue color when methylene blue dye reacts with synthetic-detergent compounds. According to Goerlitz and Brown (1972, p. 11), MBAS, synthetic detergents, or surfactants occur in natural water almost exclusively as a result of pollution. Some materials other than manmade surface-active agents react with methylene blue dye to give positive interferences, but the occurrence of these materials at interference levels is rare (U.S. Environmental Protection Agency, 1971, p. 132). According to Wayman (1962, p. B-120), in the analyses of surface-water, ground-water, and public-water supplies, concentrations of less than 0.1 mg/l MBAS should be reported with some reservations.

Other determinations that are often indicative of pollution are BOD (biochemical oxygen demand), DOC (dissolved organic carbon), minor elements (including heavy metals), pesticides, and polychlorinated biphenyls (PCBs).

BOD is a measure of the quantity of dissolved oxygen, in mg/l, used for the decomposition of organic matter by micro-organisms such as bacteria. Neither the BOD nor DOC test reveals the concentration of a specific organic substance, but both provide an indication of the quantity of organic matter in the water.

Minor elements include those constituents whose concentrations usually do not exceed 1 mg/l, although in some waters one or more of them may be present in comparatively large amounts. Minor elements considered in this report are aluminum (Al), arsenic (As), boron (B), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), manganese (Mn), mercury (Hg), nickel (Ni), strontium (Sr), and zinc (Zn).

Insecticides and herbicides are broad classes of toxicants that are used to control insect and plant pests. The analysis of water samples for pesticides included the following determinations.

<u>Chlorinated-hydrocarbon insecticides</u>	<u>Phosphorothiate insecticides</u>	<u>Chlorinated-hydrocarbon herbicides</u>
Aldrin	Diazinon	2,4-D
Chlordane	Malathion	2,4,5-T
DDD	Methyl parathion	Silvex
DDE		
DDT		
Dieldrin		
Endrin		
Heptachlor		
Heptachlor epoxide		
Lindane		
Toxaphene		

PCBs are industrial chemicals, similar in structure to organochlorine insecticides, that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. Samples from selected sites were analyzed for these constituents.

The analytical methods used are described by Brown, Skougstad, and Fishman (1970), Goerlitz and Brown (1972), and Slack and others (1973).

WELL-NUMBERING SYSTEM

The well-numbering system in Texas was developed by the Texas Water Development Board 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 7-1/2-minute quadrangles which are given two-digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7-1/2-minute quadrangle is divided into 2-1/2-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 2-1/2-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 7-1/2-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.

WATER-QUALITY STANDARDS AND CRITERIA

Water-quality standards for streams and coastal waters in Texas have been published by the Texas Water Quality Board (1973). These standards consist of three parts:

1. General standards applicable to all surface waters of the State at all times to the maximum extent feasible.
2. Numerical standards applicable to specific surface waters designated in the standards.
3. Standards applicable to water-use classifications.

The water-use classifications for which standards have been established are contact recreation waters, noncontact recreation waters, domestic raw-water supplies, irrigation waters, and shellfish waters.

According to the Texas Water Quality Board (1973, p. 4), "It is the goal that the chemical quality of all surface waters used for domestic raw-water supply conform to the U.S. Public Health Service Drinking Water Standards, revised 1962, or latest revision. However, it must be realized that some surface waters are being used that cannot meet these standards. Since in these cases it is the only source available, these surface waters may be deemed suitable for use as a domestic raw-water supply, where the chemical constituents do not pose a potential health hazard."

The Texas Water Quality Board (1973, p. 7) states, "With specific reference to public water supplies, toxic materials not removable by ordinary water treatment techniques shall not exceed those enumerated in U.S. Public Health Service Drinking Water Standards, 1962 edition, or later revision."

The latest revisions of the drinking water standards, which will become effective in June 1977, have been promulgated in the Federal Register (vol. 40, no. 248, p. 59570-59574) as U.S. Environmental Protection Agency National Interim Primary Drinking Water Regulations (1975). These regulations establish maximum contaminant levels for community and noncommunity public water systems.

The following terms have been defined by the Environmental Protection Agency (EPA):

1. "Maximum contaminant level means the maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user of public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system."

2. "Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year."

- a. "Community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents."

- b. "Noncommunity water system means a public water system that is not a community water system."

Most of the wells and streams in the San Antonio area are not subject to the National Interim Primary Drinking Water Regulations because they are not being used for public water supply. However, most of the wells supply drinking water to the individual owners; and most of the recharge to the Edwards aquifer is derived from the streams. Therefore, the regulations for some of the properties or constituents are quoted here as a basis for comparison. The concentration units for the maximum contamination levels have been converted to those usually reported by the Geological Survey. All concentrations are in micrograms per litre ($\mu\text{g/l}$) except nitrate (as nitrogen) which is in milligrams per litre (mg/l).

"The following are the maximum contaminant levels for inorganic chemicals other than fluoride":

<u>Contaminant</u>	<u>Level</u>
Arsenic	50 $\mu\text{g/l}$
Barium	1,000 $\mu\text{g/l}$
Cadmium	10 $\mu\text{g/l}$
Chromium	50 $\mu\text{g/l}$
Lead	50 $\mu\text{g/l}$
Mercury	2 $\mu\text{g/l}$
Nitrate (as N)	10 mg/l
Selenium	10 $\mu\text{g/l}$
Silver	50 $\mu\text{g/l}$

"The maximum contaminant level for nitrate is applicable to both community water systems and noncommunity water systems. The levels for the other inorganic chemical apply only to community water systems."

"When the annual average of the maximum daily air temperature for the location in which the community water system is situated is the following, the maximum contaminant levels for fluoride are":

Temperature		Level (milligrams per litre)
<u>Degrees Fahrenheit</u>	<u>Degrees Celsius</u>	
53.7 and below	12.0 and below	2.4
53.8 to 58.3	12.1 to 14.6	2.2
58.4 to 63.8	14.7 to 17.6	2.0
63.9 to 70.6	17.7 to 21.4	1.8
70.7 to 79.2	21.5 to 26.2	1.6
79.3 to 90.5	26.3 to 32.5	1.4

"The following are the maximum contaminant levels for organic chemicals. They apply only to community water systems."

	Level (micrograms per litre)
(a) Chlorinated hydrocarbons:	
Endrin (1,2,3,4,10, 10-hexachloro-6,7-epoxy-1,4, 4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8 - dimethano naphthalene).	0.2
Lindane (1,2,3,4,5,6-hexachloro cyclohexane, gamma isomer).	4
Methoxychlor (1,1,1-Trichloro-2, 2 - bis [p-methoxyphenyl] ethane).	100
Toxaphene (C ₁₀ H ₁₀ Cl ₈ -Technical chlorinated camphene, 67-69 percent chlorine).	5
(b) Chlorophenoxys:	
2,4-D, (2,4-Dichlorophenoxyacetic acid).	100
2,4,5-TP Silvex (2,4,5-Trichloro-phenoxypropionic acid).	10

"It is anticipated that additional organic pesticides will be added to the regulations if surveys of pesticides in drinking water being conducted by EPA indicate that this is needed."

The maximum contaminant levels for coliform bacteria, applicable to community water systems and noncommunity water systems, depend upon the population served, the number of samples per month, and the method of analysis. A discussion of these factors is beyond the scope of this report, but with reference to a single sample the following is stated by EPA:

"When the coliform bacteria in a single sample exceeds 4 per 100 ml, at least two consecutive daily check samples shall be collected and examined from the same sampling point. Additional check samples shall be collected daily, or at a frequency established by the State, until the results obtained from at least two consecutive check samples show less than 1 coliform bacterium per 100 ml."

The Federal Water Pollution Control Act Amendments of 1972 required the U.S. Environmental Protection Agency by October 18, 1973, to publish and revise from time to time thereafter, both criteria for water quality and information for the restoration and maintenance of aquatic integrity and the measurement and classification of water.

EPA's "Proposed Criteria for Water Quality" contains the criteria for water quality for the protection of human health and for the protection and propagation of desired species of aquatic biota (U.S. Environmental Protection Agency, 1973).

According to EPA (1973, p. 12-13):

"Water quality criteria as compiled in this document are defined as the acceptable limits of constituents in receiving waters based upon an evaluation of the latest scientific information by the Environmental Protection Agency.

"The criteria are based upon toxicity studies and other field and laboratory tests which assess the effects of pollutants on agricultural crops, domestic livestock, aquatic life, wildlife, and man. The acceptable limits specified in the criteria for substances which exhibit toxic effects were derived by the application of scientific judgment to lethal dose or lethal concentration data in a manner that provides a margin of safety to test organisms. For those substances whose effects are more aptly described as undesirable such as impairing aquatic habitats, causing taste and odor problems in water supplies or reducing the aesthetic or recreational quality of a water body, limits which minimize these effects were established on the basis of field and laboratory investigations."

EPA's "Proposed Criteria for Water Quality" are arranged alphabetically by water use, with the limits for each pollutant followed immediately by the supporting scientific rationale. The maximum acceptable limits for many of the properties or constituents of raw water used for drinking-water supplies are tabulated below. For a discussion of the supporting scientific rationale, the reader is referred to the report by EPA (1973, p. 192-249).

<u>Property or constituent</u>	<u>Maximum acceptable limit</u>
Ammonia (N)	0.5 mg/l
Arsenic (As)	100 µg/l
Boron (B)	1,000 µg/l
Cadmium (Cd)	10 µg/l
Chloride (Cl)	250 mg/l
Chromium (Cr)	50 µg/l
Copper (Cu)	1,000 µg/l
Iron (Fe)	300 µg/l
Lead (Pb)	50 µg/l
Manganese (Mn)	50 µg/l
Mercury (Hg)	2 µg/l
Nitrate (N)	10 mg/l
Nitrite (N)	1 mg/l
Sulfate (SO ₄)	250 mg/l
Zinc (Zn)	5,000 µg/l

<u>Property or constituent</u>	<u>Maximum acceptable limit</u>
Bacteria:	
Total coliforms	10,000 colonies per 100 ml
Fecal coliforms	2,000 colonies per 100 ml
Methylene blue active substances (MBAS)	0.5 mg/l
Insecticides--chlorinated hydrocarbons:	
Aldrin	1 µg/l
Chlordane	3 µg/l
DDT	50 µg/l
Dieldrin	1 µg/l
Endrin	0.5 µg/l
Heptachlor	0.1 µg/l
Heptachlor epoxide	0.1 µg/l
Lindane	5 µg/l
Methoxychlor	1,000 µg/l
Toxaphene	5 µg/l
Herbicides--chlorophenoxy:	
2,4-D	20 µg/l
2,4,5-T	2 µg/l
Silvex	30 µg/l

These criteria are based upon current knowledge of the effects on health and welfare; however, it must be emphasized that many other factors must be considered in making decisions relative to establishing particular standards and control measures. These criteria are quoted only as a basis for comparison.

WATER QUALITY

Ground Water

The results of the analyses of water samples collected from wells and springs in the Edwards aquifer from August 1968 to January 1975 are given in table 1.

Water from the Edwards aquifer in the San Antonio area is usually of the calcium bicarbonate type and very hard (greater than 180 mg/l as calcium carbonate). The concentrations of dissolved solids (as determined by laboratory analyses or as estimated from the specific conductance) ranged from about 200 mg/l in a sample from well DX-68-23-219 on June 13, 1973, to 527 mg/l in a sample collected from well AY-68-28-205 on August 22, 1972. The data in table 1 and on figure 2 show that the dissolved-solids concentrations in ground water usually range from 250 to 350 mg/l and generally increase toward the south and southeast. Samples from only nine wells contained more than 350 mg/l dissolved solids.

The high concentrations of dissolved solids and other constituents in samples collected from well AY-68-28-205 on August 22, 1972, August 24, 1972, and April 24, 1973, resulted from the use of hydrochloric acid to improve the yield of the well. A comparison of these analyses with the analysis of a sample collected on September 9, 1974, shows a decrease in dissolved solids, indicating that the mineralized water resulting from the reaction of the acid with the limestone had been pumped from the aquifer or diluted by water of better quality in the aquifer.

The dissolved-chloride and dissolved-sulfate concentrations in all samples of ground water were less than 250 mg/l, which is EPA's maximum acceptable limits for raw water used for drinking-water supplies.

The chloride and sulfate concentrations in most samples of ground water in the area are low. The chloride concentration ranged from 3.7 mg/l in a sample from well DX-68-23-219 on June 13, 1973, to 130 mg/l in a sample from well AY-68-28-205 on August 22, 1972. The high concentration of chloride resulted from acidizing the well with hydrochloric acid. Data in table 1 shows that the chloride content of the water usually ranged from about 6 to 20 mg/l. Samples from only 14 wells contained more than 20 mg/l chloride.

The sulfate concentration ranged from 0.0 mg/l in a sample from well AY-68-29-105 on November 12, 1969, to 83 mg/l in a sample from well YP-69-45-404 on July 28, 1971. Data in table 1 show that the sulfate content of the water usually ranges from 0.0 to 30 mg/l. Samples from only 17 wells contained more than 30 mg/l sulfate.

The nitrate concentration in all samples of ground water was less than 10 mg/l, which is the maximum contaminant level for public water systems and the maximum acceptable limit proposed by EPA for raw water used for drinking-water supplies.

The concentration of total nitrite plus nitrate nitrogen ranged from 0.00 mg/l in a sample collected from well AY-68-29-809 on October 31, 1968, to 5.5 mg/l in a sample collected from well TD-69-39-501 on February 22, 1974. At least 1 sample from 36 wells contained more than 2.3 mg/l and at least 1 sample from 17 wells contained more than 3.0 mg/l. The nitrite plus nitrate content of water at some sites varied significantly with time. The nitrite plus nitrate content of water from 19 wells varied as much as 2 mg/l; however, the data in table 1 show no well-defined upward trend in the nitrite plus nitrate concentration in ground water in the area.

The maximum total phosphorus concentration was 0.12 mg/l in a sample from well AY-68-27-504 on March 3, 1971. No measurable phosphorus was found in samples from 35 wells, and samples from only 13 wells contained more than 0.03 mg/l phosphorus. The phosphorus concentration in samples collected from these 13 wells varied considerably with time. For example, the phosphorus concentration in samples from well AY-68-27-504 ranged from 0.00 to 0.12 mg/l and the concentration in samples from well AY-68-27-509 ranged from 0.00 to 0.07 mg/l. However, no significant increase in phosphorus concentration with time was noted for any of the wells.

Samples collected from most of the wells and from three springs contained no measurable MBAS. The MBAS concentration did not exceed 0.5 mg/l (the maximum acceptable limit proposed by EPA for raw water used for drinking-water supplies) in any of the samples. Samples from only two wells, which are located in the artesian part of the aquifer, contained significant concentrations of MBAS. Samples collected from wells AY-68-29-409 and AY-68-29-809 on April 2, 1969, contained 0.1 and 0.2 mg/l, respectively. Inspection of the sites indicates that waste water probably entered these wells through defective casing near the land surface.

The concentrations of dissolved organic carbon and BOD were low in most samples of ground water in the area. The BOD for most samples was less than 0.5 mg/l. Samples from only 11 wells contained more than 1.0 mg/l, and the maximum BOD was 3.0 mg/l in a sample collected from well AY-68-29-809 on October 31, 1968.

The concentration of dissolved organic carbon ranged from 0.0 to 9.0 mg/l. Samples from only nine wells contained more than 4.0 mg/l.

The concentrations of most of the minor elements in most of the samples analyzed were either less than the detectable limits or very low. A sample collected from well YP-69-50-203 on September 9, 1974, contained 1.9 µg/l (micrograms per litre) of dissolved mercury. The source of the mercury in the sample has not been determined.

Samples collected from wells AY-68-29-403 and AY-68-29-503 in the artesian zone on October 14, 1971, contained 1.0 and 1.4 $\mu\text{g/l}$ of dissolved mercury, respectively. A sample collected from flood runoff in a nearby stream on October 20, 1971, contained 1.6 $\mu\text{g/l}$ of mercury. The mercury probably entered the wells through defective casing near the land surface rather than by direct infiltration. According to drillers' logs of well AY-68-29-403 and AY-68-29-503, the top of the Edwards aquifer at these locations is 231 and 237 feet (70 and 72 metres), respectively, below the land surface.

The following is a list of the minor elements measured and their respective ranges. The concentrations of these and other inorganic chemical constituents that affect the suitability of water for drinking purposes and for which analyses are available were less than the maximum contaminant levels for public water systems and(or) the maximum acceptable limits proposed by EPA for raw water used for drinking-water supplies.

<u>Constituents</u>	<u>Range (micrograms per litre)</u>
Aluminum	0 - 100
Arsenic	0 - 2
Boron	0 - 960
Cadmium	0 - 1
Chromium	0 - <10
Cobalt	0 - 2
Copper	0 - 40
Iron	0 - 2,900
Lead	0 - 10
Manganese	0 - 80
Mercury	.0 - 1.9
Nickel	0 - 10
Strontium	100 - 49,000
Zinc	0 - 1,000

The results of analyses of water samples from the Edwards aquifer for total coliform, fecal coliform, and fecal streptococci bacteria from August 1969 to January 1975, as given in table 1, are summarized as follows.

Zone of Edwards aquifer where well or spring is located	Type of bacteria	Number of wells and springs in which at least one sample was positive	Number of wells in which all samples were negative	Total
Water table	Total coliform bacteria	<u>a/</u> 65	28	<u>a/</u> 93
	Fecal coliform bacteria	18	42	60
	Fecal streptococci bacteria	28	32	60
Artesian	Total coliform bacteria	16	20	36
	Fecal coliform bacteria	1	23	24
	Fecal streptococci bacteria	4	21	25

a/ Includes two springs.

The tabulation shows that at least 1 sample from each of 127 wells (91 wells in the water-table zone and 36 wells in the artesian zone) and 2 springs (both in the water-table zone) were analyzed for total coliform bacteria. These bacteria were found in at least 1 sample from each of 79 wells (63 wells in the water-table zone and 16 wells in the artesian zone) and 2 springs (fig. 3).

The density of total coliform bacteria in samples from the water-table zone ranged from zero in many samples to 32,000 colonies per 100 ml in a sample collected from well DX-68-23-219 on June 13, 1973, after pumping for 60 minutes. The density of total coliform bacteria in samples from the artesian zone ranged from zero in many samples to 14,000 colonies per 100 ml in a sample from well AY-68-29-503 on March 7, 1971. Samples from only 24 wells had a coliform bacteria density of more than 100 colonies per 100 ml; 15 of the wells are located in the recharge zone, 6 of the wells are located in the water-table zone just downdip from the recharge zone, and 3 of the wells are located in the artesian zone. An inspection of the three wells (AY-68-29-403, AY-68-29-407, and AY-68-29-503) in the artesian zone indicates that the coliform bacteria probably entered the wells through defective casing near the land surface.

The density of fecal coliform bacteria in samples from 42 wells in the water-table zone ranged from zero in many samples to 3,100 colonies per 100 ml in a sample collected from well DX-68-23-219 on June 13, 1973, following a period of intensive rainfall. At least 1 sample from 18 wells in the water-table zone contained fecal coliform bacteria. Fifteen wells are located in the recharge zone, and three wells are located in the water-table zone just downdip from the recharge zone.

Only 1 sample from 24 wells in the artesian zone contained fecal coliform bacteria. A sample collected from well AY-68-29-409 on August 12, 1971, contained 1 colony per 100 ml. The casing of this well is probably defective.

The density of fecal streptococci bacteria in samples collected from 60 wells in the water-table zone ranged from zero in many samples to 16,000 colonies per 100 ml in a sample from well DX-68-23-219 on June 13, 1973. At least 1 sample from each of 28 wells in the water-table zone contained fecal streptococci bacteria. Twenty-two of the wells are located in the recharge zone, and six of the wells are located in the water-table zone just downdip from the recharge zone.

The density of fecal streptococci bacteria in samples collected from 25 wells in the artesian zone ranged from zero in most samples to 59 colonies per 100 ml in a sample from well AY-68-29-403 on April 13, 1972. At least one sample from each of four wells in the artesian zone contained fecal streptococci bacteria. Two of the wells (AY-68-29-403 and AY-68-29-503) have defective casings. It has not been determined how the fecal streptococci bacteria entered wells AY-68-29-810 and AY-68-36-102, but the most probable source of pollution is a leaky well seal.

The presence of fecal coliform and fecal streptococci bacteria, the variations in the number of total coliform bacteria, the concentration of total nitrite plus nitrate and total phosphate in samples from some of the wells show that fecal pollution is reaching the Edwards aquifer. However, the absence or low density of coliform bacteria in samples from many of the wells indicates that the amount of pollution reaching the aquifer is small in comparison to the water available for dispersion and dilution at the present time of relatively light development on or above the recharge zone.

The source of the pollution in many of the wells in the recharge zone has not been determined because of the heterogeneity of the aquifer and the variations in the rates and direction of the movement of water in the fractured and cavernous limestone. The areal variation in the locations of the wells where pollution has been noted indicates that the pollution is localized. The most probable source of the pollution is runoff from the land surface and from effluent from septic tanks entering through fractures in the recharge zone or infiltrating through the thin soil mantle into poorly-sealed or inadequately-cased wells. Samples collected from properly-constructed and sealed public-supply wells were free of indicator bacteria.

The high coliform bacteria density in some wells in the recharge zone indicates that this zone, which is characterized by areas of thin soil or bare rock, is susceptible to pollution. Most of the wells in the recharge zone are poorly cased or poorly sealed small-capacity domestic and stock wells. The relationship between rainfall and variations in the density of coliform bacteria in samples from a well can be illustrated by analyses for well AY-68-27-603 (table 1). The coliform bacteria density in water from this well, when first sampled on August 4, 1971, after about a 5-inch (127-millimetre) rain, was 3,900 colonies per 100 ml. The number of coliform bacteria declined progressively after the first sampling period. In April 1972, after about 3-1/2 months of deficient rainfall, no coliform bacteria were found in samples from the well.

During the period of intensive rainfall in August 1971, a significant increase in the number of coliform bacteria was noted in samples collected from other wells in the recharge zone. For example, fecal coliform and fecal streptococci bacteria were absent or the densities were very low in samples collected from well AY-68-27-509 before August 1971. However, on August 5, 1971, after a prolonged period of rainfall, the densities of fecal coliform and fecal streptococci bacteria increased to 130 colonies per 100 ml and 280 colonies per 100 ml, respectively. Similar increases in the densities of these groups of bacteria were noted in samples collected from other wells during this period of intensive rainfall.

Since 1968, samples from 24 wells have been analyzed for chlorinated-hydrocarbon insecticides and chlorinated-hydrocarbon herbicides. Samples from eight of the wells were also analyzed for phosphorothioate insecticides.

Samples from only two wells contained insecticides. The concentrations in samples from neither of these wells exceeded the maximum acceptable limits proposed by EPA for raw water used for drinking-water supplies. Water samples collected in 1968 from well YP-69-35-804 contained DDE and DDT in the following concentrations:

	<u>DDE</u>	<u>DDT</u>
May 21, 1968	0.02 µg/l	0.01 µg/l
June 13, 1968	.04 µg/l	1.0 µg/l
August 10, 1968	.01 µg/l	.06 µg/l

A water sample collected from well YP-69-50-107 on August 8, 1969, contained 0.08 µg/l dieldrin, but no dieldrin was detected in a subsequent sample collected on October 23, 1969. Field investigations showed that the source of pesticides in these wells was surface drainage.

These data indicate that neither the inorganic nor organic chemical quality of water in most areas of the Edwards aquifer has been degraded significantly by the entrance of domestic, industrial, or agricultural wastes. However, the fairly large variation in the concentration of total nitrate plus nitrite nitrogen, total phosphorus, and bacteria in water from some wells (primarily in the water-table zone) and the presence of trace concentrations of dissolved mercury, pesticides, and other constituents in a few are evidence that pollutants are reaching the aquifer.

These data serve to illustrate that the nearly unrestricted movement of liquids from the surface to the aquifer in the recharge zone presents an ever-present hazard to the aquifer if a major surface spill of a toxic substance should occur. The many poorly-constructed wells in the artesian part of the aquifer could allow toxic substances to enter the aquifer.

Surface Water

Surface-water sampling sites are located in the outcrop area or on streams that flow into the outcrop area. Data collected at these sites (table 2) show the chemical composition of surface water to be very similar to that of ground water in the area. Water in most streams is very hard and of the calcium bicarbonate type.

Limited data on the bacteriological quality of the surface water show that total coliform bacteria were present at each of the sites sampled and that fecal coliform and fecal streptococci bacteria were present at most sites. Although the bacterial densities at most sites were low for untreated surface waters, they varied greatly in both time and place because of changes in dilution levels with varying volumes of inflows and because of changes in nutrient levels, climatic conditions, and other environmental factors that affect the survival rate of the bacteria.

Data collected at sites 2 through 36 provide an indication of the quality of surface waters in the area and generally show higher bacteria levels downstream from urban developments and from Garner State Park. The dilution of manmade wastes by natural streamflow was so great in most streams that the effects of the wastes could not be evaluated from chemical characteristics. However, none of the chemical constituents for which analyses are available exceeded the maximum acceptable limits proposed by EPA for raw water used for drinking-water supplies. The extent of water-quality deterioration of surface waters flowing into the recharge zone cannot be predicted from available data, but will depend on the type and density of future developments above the recharge zone.

Water samples from 10 surface-water sampling sites were analyzed for pesticides. Pesticides were detected in none of the samples except from site 14. A sample collected from this site on August 27, 1971, contained 0.03 $\mu\text{g/l}$ of 2,4-D, which is significantly less than the maximum acceptable limit proposed by EPA for raw water used for drinking-water supplies.

Since 1969, the Geological Survey, in cooperation with the Texas Water Development Board, has collected data 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), and Rawson (1974). Unpublished data collected since 1973 are available in the office of the U.S. Geological Survey in Austin, Texas. A discussion of these data are beyond the scope of this report, and the reader is referred to the references noted.

SUMMARY AND CONCLUSIONS

Ground water from the Edwards aquifer is usually very hard (greater than 180 mg/l as calcium carbonate) and of the calcium bicarbonate type. The concentrations of dissolved solids in the water usually range from 250 to 350 mg/l; the dissolved-chloride concentration usually ranges from about 6 to 20 mg/l; and the dissolved-sulfate concentration usually ranges from 0.0 to 30 mg/l. The observed range in the concentrations of total nitrite plus nitrate nitrogen and total phosphorus was 0.00 - 5.5 mg/l and 0.00 - 0.12 mg/l, respectively.

Bacteriological indicators of pollution were found in samples from the water-table and artesian zones of the aquifer. Coliform bacteria were found in at least 1 sample from 63 wells in the water-table zone and 16 wells in the artesian zone. Although the coliform bacteria density in samples from many of these wells was low, samples from 21 wells in the water-table zone and 3 wells in the artesian zone contained more than 100 coliform bacteria colonies per 100 ml. The high coliform bacteria density in wells in the recharge zone indicates that this zone, which is characterized by areas of thin soil or bare rock, is susceptible to pollution. The nearly unrestricted movement of liquids from the surface to the aquifer in the recharge zone presents an ever-present hazard to the aquifer if a major surface spill of a toxic substance should occur. The many poorly-constructed wells in the artesian part of the aquifer could allow toxic substances to enter the aquifer.

At least 1 sample from each of 18 wells in the water-table zone and 1 well in the artesian zone contained fecal coliform bacteria. At least 1 sample from each of 28 wells in the water-table zone and 4 wells in the artesian zone contained fecal streptococci bacteria. The presence of these bacteria, the variations in the number of total coliform bacteria, and the concentrations of nitrite plus nitrate and phosphorus in some wells show that fecal pollution is reaching the ground-water reservoir.

The data indicate that pollution is localized and results principally from runoff from the land surface and from effluent from septic tanks entering the aquifer through fractures in the recharge zone or infiltrating through the thin soil into poorly-sealed or inadequately-cased wells in the recharge zone. The pollutants in samples from most wells in the water-table zone just down dip from the recharge zone as well as the artesian zone entered the wells at the surface or through defective casing.

The inorganic and organic chemical quality of water throughout most of the ground-water reservoir has not been degraded significantly. The concentrations of none of the major inorganic constituents, minor elements, or pesticides for which analyses are available exceeded the U.S. Environmental Protection Agency's "maximum contaminant levels" for public water systems or "maximum acceptable limits" for raw water used for drinking-water supplies.

The chemical composition of water in streams that cross the recharge zone of the Edwards aquifer is very similar to that of ground water in the area. Water in most streams is very hard and of the calcium bicarbonate type.

Coliform bacteria were present at each of the surface-water data-collection sites, and fecal coliform and fecal streptococci bacteria were present at most sites. Although the densities of these bacteria were low for untreated surface water, they varied greatly in both time and place.

Trace concentrations of several pesticides were observed in samples from two wells and one surface site.

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

BEXAR COUNTY										
LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD TO SAM- PLING (MIN) (720004)	TOTAL DEPTH OF WELL (FT) (720008)	INSTAN- TANEOUS FLOW RATE (GPM) (000509)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
AY-68-27-302	72-04-05	1115	10	365	10	--	--	--	--	--
	72-04-05	1205	60	365	10	15	87	12	--	5.5
	72-05-09	1546	10	365	10	--	--	--	--	--
	72-05-09	1631	60	365	10	--	--	--	--	--
	74-10-09	1430	60	517	10	11	85	11	6.1	--
AY-68-27-401	74-04-12	--	10	--	5	--	32	18	--	--
AY-68-27-503	69-07-18	--	many hrs	435	100	10	83	15	6.1	--
	71-04-07	--	many hrs	435	100	--	--	--	--	--
	71-08-05	--	many hrs	435	100	--	--	--	--	--
	72-01-27	1240	many hrs	435	200	--	--	--	--	--
	72-04-04	1300	10	435	100	--	--	--	--	--
	72-05-09	1350	many hrs	435	225	--	--	--	--	--
	72-06-23	1510	10	435	220	--	--	--	--	--
	72-08-23	1600	60	435	220	--	--	--	--	--
	72-12-14	--	10	435	250	--	--	--	--	--
	73-04-25	--	360	435	250	--	83	15	--	--
	74-09-18	1200	120	435	225	12	82	16	6.9	--
	74-12-03	1110	120	435	240	11	80	14	6.7	--
	69-07-18	--	10	508	400	10	93	14	8.3	--
	71-03-03	--	150	508	500	--	--	17	--	--
	72-01-27	0935	10	508	525	--	--	13	--	--
AY-68-27-504	72-01-27	1005	40	508	525	11	93	13	9.2	--
	72-01-27	1055	90	508	525	--	--	--	--	--
	72-01-27	1155	150	508	525	11	94	13	9.0	--
	72-04-04	--	many hrs	508	375	--	--	--	--	--
	72-04-05	1000	10	508	375	--	--	--	--	--
	72-04-12	1330	many hrs	508	435	--	--	--	--	--
	72-05-09	1435	60	508	525	--	--	--	--	--
	72-08-24	1150	40	508	435	12	94	15	8.0	--
	72-12-14	--	10	508	525	--	--	--	--	--
	73-09-11	1315	many hrs	508	435	12	90	13	9.0	--
	74-02-22	1000	15	508	325	--	94	14	9.2	--
	74-09-18	1135	10	508	525	--	--	--	--	--
	74-09-18	1225	60	508	525	11	84	11	7.4	--
	69-07-18	--	10	400	7.0	10	80	16	6.6	--
	69-07-18	--	30	385	10	10	72	16	6.1	--
AY-68-27-506	71-04-24	--	60	385	9.0	--	--	--	--	--
AY-68-27-507	71-06-03	0915	10	385	9.0	--	--	--	--	--
	71-06-03	0945	40	385	9.0	--	--	--	6.4	--
	71-06-03	1035	90	385	9.0	--	--	--	--	--
	71-06-03	1135	150	385	9.0	--	--	--	6.5	--
	71-06-03	1235	210	385	9.2	--	--	--	6.4	--
	72-04-04	1000	10	385	9.0	--	--	--	--	--
	72-04-04	1050	60	385	9.0	--	--	--	--	--
	72-05-10	0945	10	385	9.0	--	--	--	--	--
	72-05-10	1035	60	385	9.0	11	70	16	5.9	--
	73-04-25	0944	10	385	9.0	--	--	--	--	--
	73-04-25	1034	60	385	9.0	10	79	15	--	--
	73-11-07	1148	10	385	9.0	--	--	--	--	--
	73-11-07	1238	60	385	9.0	11	80	14	6.4	--
	74-09-18	1115	30	385	9.0	11	74	14	7.2	--
AY-68-27-508	69-09-15	--	10	320	10	11	85	13	--	7.6
	71-08-05	--	60	320	10	--	--	--	--	--
	73-04-11	0910	10	343	10	--	--	--	--	--
	73-04-11	1000	60	343	10	--	89	15	6.7	--
	74-09-18	1430	60	343	10	11	83	14	7.4	--
AY-68-27-509	69-09-15	--	10	343	8.0	11	88	14	--	7.6
	71-02-17	0920	10	343	8.0	--	--	--	--	--
	71-02-17	0950	40	343	8.0	--	91	16	--	--
	71-02-17	1040	90	343	8.0	--	--	--	--	--
	71-02-17	1140	150	343	8.0	--	--	--	--	--
	71-03-03	0925	10	343	8.0	--	--	--	--	--
	71-03-03	0955	40	343	8.0	--	--	--	--	--
	71-03-03	1045	90	343	8.0	--	--	--	--	--
	71-03-03	1145	150	343	8.0	--	--	--	--	--
	71-03-03	1345	270	343	8.0	--	--	--	--	--
	71-03-03	1545	390	343	8.0	--	--	16	--	--
	71-03-03	1745	510	343	8.0	--	--	--	--	--
	71-03-03	1945	630	343	8.0	--	91	16	--	--
	71-03-04	0810	10	343	8.0	--	--	--	--	--
	71-03-04	0840	40	343	8.0	--	--	--	--	--
AY-68-27-510	71-03-04	0930	90	343	8.0	--	--	--	--	--
	71-03-04	1030	150	343	8.0	--	--	--	--	--
	71-08-05	--	60	343	8.0	--	--	--	--	--
	73-09-11	1410	10	343	8.0	--	--	--	--	--
	73-09-11	1500	60	343	8.0	12	90	13	8.5	--
AY-68-27-511	71-03-03	--	15	390	12	11	--	16	--	--
	71-04-28	--	60	390	12	--	--	--	--	--
	73-11-07	1440	10	390	12	--	--	--	--	--
AY-68-27-511	73-11-07	1530	60	390	12	11	76	18	5.8	--
	71-08-05	1210	10	365	7.0	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRATE PLUS NITRITE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
AY-68-27-302	72-04-05	--	--	--	--	9.1	--	--	--	--
	72-04-05	--	302	0	9.2	10	.1	--	2.0	.00
	72-05-09	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	74-10-09	.6	292	0	10	12	--	--	1.7	.07
AY-68-27-401	72-04-12	--	266	0	65	15	--	--	--	--
AY-68-27-503	69-07-18	.8	292	0	17	13	.2	--	1.5	.00
	71-04-07	--	--	--	--	--	--	--	1.8	.00
	71-08-05	--	289	0	21	14	--	--	1.6	.00
	72-01-27	--	--	--	--	--	--	--	--	--
	72-04-04	--	--	--	--	17	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	72-08-23	--	--	--	--	--	--	--	--	--
	72-08-23	--	--	--	--	--	--	--	1.2	.00
	72-12-14	--	--	--	--	--	--	--	--	--
	73-04-25	--	280	0	20	12	--	--	1.7	.00
	74-09-18	.7	284	0	16	13	--	--	2.7	.06
	74-12-33	1.2	284	0	16	13	.1	--	1.7	.05
AY-68-27-504	69-07-18	1.1	318	0	23	14	.2	--	1.4	.00
	71-03-03	--	--	--	33	14	--	--	1.6	.00
	72-01-27	--	--	--	24	15	--	--	1.9	.10
	72-01-27	1.4	306	0	24	16	.2	--	1.8	.04
	72-01-27	--	--	--	--	--	--	--	1.8	.02
	72-01-27	1.4	306	0	24	15	.2	--	1.8	.06
	72-04-04	--	--	--	--	16	--	--	--	--
	72-04-05	--	--	--	--	16	--	--	--	--
	72-04-12	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	72-08-24	2.2	332	0	22	12	.2	--	1.1	.00
	72-12-14	--	--	--	--	--	--	--	--	--
	73-09-11	1.5	308	0	22	16	.2	--	1.1	.00
	74-02-22	1.4	312	0	24	16	.2	--	1.1	.02
	74-09-18	--	--	--	--	--	--	--	--	--
	74-09-18	1.0	275	0	14	11	--	--	1.3	.05
AY-68-27-506	69-07-18	.9	292	0	16	13	.2	--	1.6	.00
AY-68-27-507	69-07-18	.6	272	0	16	12	.2	--	1.3	.00
	71-04-28	--	--	--	--	--	--	--	--	--
	71-06-03	--	--	--	--	--	--	--	1.7	.00
	71-06-03	1.1	268	0	25	14	--	--	1.7	.00
	71-06-03	--	--	--	--	--	--	--	1.8	.00
	71-06-03	1.1	268	0	25	14	--	--	1.7	.00
	71-06-03	1.2	268	0	24	14	--	--	1.8	.00
	72-04-04	--	--	--	--	11	--	--	1.4	.00
	72-04-04	--	--	--	--	11	--	--	--	--
	72-05-10	--	--	--	--	--	--	--	--	--
	72-05-10	1.0	273	0	13	12	.2	--	1.7	.00
	73-04-25	--	--	--	--	--	--	--	--	--
	73-04-25	--	272	0	15	12	.2	--	1.7	.00
	73-11-07	--	--	--	--	--	--	--	--	--
	73-11-07	1.1	282	0	15	14	.1	--	1.5	.00
	74-09-18	.8	277	0	14	13	--	--	1.3	.05
AY-68-27-508	69-09-15	--	294	0	16	12	.2	--	2.0	.00
	71-08-05	--	288	0	26	13	--	--	2.1	.00
	73-04-11	--	--	--	--	--	--	--	--	--
	73-04-11	.8	292	0	23	12	--	--	1.3	.00
	74-09-18	.5	296	0	16	13	--	--	2.7	.12
AY-68-27-509	69-09-15	--	296	0	26	14	.2	--	1.1	.00
	71-02-17	--	--	--	--	--	--	--	1.6	.00
	71-02-17	--	308	0	33	15	--	--	--	--
	71-02-17	--	--	--	--	--	--	--	1.6	.00
	71-02-17	--	--	--	--	--	--	--	--	--
	71-03-03	--	--	--	--	--	--	--	1.8	.00
	71-03-03	--	--	--	--	--	--	--	1.6	.00
	71-03-03	--	--	--	--	--	--	--	1.6	.00
	71-03-03	--	--	--	--	--	--	--	1.8	.00
	71-03-03	--	--	--	--	--	--	--	1.7	.00
	71-03-03	--	--	--	29	14	--	--	1.6	.00
	71-03-03	--	--	--	--	--	--	--	1.5	.00
	71-03-03	--	310	0	29	14	--	--	1.9	.00
	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-08-05	--	--	--	--	--	--	--	2.7	.00
	73-09-11	--	--	--	--	--	--	--	--	--
	73-09-11	1.3	300	0	25	16	.2	--	1.4	.00
AY-68-27-510	71-03-03	--	--	--	20	12	.2	--	1.8	.00
	71-04-28	--	--	--	--	--	--	--	--	--
	73-11-07	--	--	--	--	--	--	--	--	--
	73-11-07	1.0	283	0	20	13	.1	--	1.5	.00
AY-68-27-511	71-08-05	--	--	--	--	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (000665)	OIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (000900)	NON- CAR- BONATE HARD- NESS (MG/L) (000902)	PERCENT SODIUM (000932)	SODIUM AD- SORP- TION RATIO (000931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (000400)	TEMPER- ATURE (DEG C) (00010)
AY-68-27-302	72-04-05	--	--	--	--	--	--	515	--	23.0
	72-04-05	.01	297	270	19	--	--	500	7.9	23.0
	72-05-09	--	--	--	--	--	--	487	--	24.0
	72-05-09	--	--	--	--	--	--	504	--	24.0
AY-68-27-401	74-10-09	.00	280	260	18	5	.2	498	7.4	25.0
	72-04-12	--	--	280	--	--	--	571	7.2	22.0
AY-68-27-503	69-07-18	.01	289	270	30	5	.2	510	7.2	--
	71-04-07	.00	--	--	--	--	--	--	--	--
	71-06-05	.00	--	--	--	--	--	523	7.7	--
	72-01-27	--	--	--	--	--	--	511	--	22.0
	72-04-04	--	--	--	--	--	--	557	--	--
	72-05-09	--	--	--	--	--	--	521	--	23.0
	72-08-23	--	--	--	--	--	--	552	--	25.0
	72-08-23	.01	--	--	--	--	--	543	--	25.5
	72-12-14	--	--	--	--	--	--	536	--	20.0
	73-04-25	.00	--	270	39	--	--	518	7.0	21.6
	74-09-18	.00	289	270	34	5	.2	508	7.5	23.5
	74-12-03	.01	282	260	24	5	.2	515	7.4	21.5
	69-07-18	.02	320	290	29	6	.2	564	7.0	22.0
	71-03-03	.12	--	--	--	--	--	--	--	--
	72-01-27	.02	--	--	--	--	--	--	--	20.0
AY-68-27-504	72-01-27	.00	319	290	35	7	.2	557	8.0	20.0
	72-01-27	.00	--	--	--	--	--	--	--	--
	72-01-27	.00	318	290	37	6	.2	561	7.9	20.0
	72-04-04	--	--	--	--	--	--	556	--	22.0
	72-04-05	--	--	--	--	--	--	557	--	22.0
	72-04-12	--	--	--	--	--	--	564	--	--
	72-05-09	--	--	--	--	--	--	511	--	23.0
	72-08-24	.03	336	300	24	5	.2	--	7.5	23.0
	72-12-14	--	--	--	--	--	--	544	--	21.0
	73-09-11	.02	315	280	26	7	.2	566	7.4	22.8
	74-02-22	.01	--	290	36	6	.2	568	7.5	21.0
	74-09-18	--	--	--	--	--	--	490	--	24.0
	74-09-16	.02	280	260	30	6	.2	490	7.4	24.0
	69-07-18	.03	287	270	26	5	.2	509	7.1	24.0
	69-07-18	.01	267	250	23	5	.2	472	7.5	22.0
AY-68-27-506 AY-68-27-507	71-04-28	--	--	--	--	--	--	502	--	--
	71-06-03	.00	--	--	--	--	--	500	--	--
	71-06-03	.00	--	--	--	0	--	507	7.7	--
	71-06-03	.00	--	--	--	--	--	504	--	--
	71-06-03	.01	--	--	--	0	--	504	7.7	--
	71-06-03	.05	--	--	--	0	--	504	7.7	--
	72-04-04	.01	--	--	--	--	--	468	--	22.0
	72-04-04	--	--	--	--	--	--	479	--	--
	72-05-10	--	--	--	--	--	--	474	--	22.0
	72-05-10	.00	262	240	20	5	.2	471	7.3	22.0
	73-04-25	--	--	--	--	--	--	462	--	21.4
	73-04-25	.00	274	260	36	--	--	482	6.9	22.4
	73-11-07	--	--	--	--	--	--	--	--	21.5
	73-11-07	.00	281	260	26	5	.2	506	6.8	22.0
	74-09-18	.00	271	240	15	6	.2	494	7.4	23.0
AY-68-27-508	69-09-15	.01	299	270	25	--	--	517	7.4	22.0
	71-08-05	.00	--	--	--	--	--	526	7.5	--
	73-04-11	--	--	--	--	--	--	526	--	21.8
	73-04-11	.00	--	280	44	5	.2	526	7.1	21.8
	74-09-18	.00	293	270	23	6	.2	534	7.4	23.0
AY-68-27-509	69-09-15	.03	312	280	35	--	--	539	7.4	23.0
	71-02-17	.07	--	--	--	--	--	--	--	--
	71-02-17	--	--	290	40	--	--	570	7.4	--
	71-02-17	.07	--	--	--	--	--	--	--	--
	71-02-17	--	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	--	--	--	--	--	--	--
	71-03-03	.04	--	290	39	--	--	561	8.0	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
AY-68-27-510	71-03-04	--	--	--	--	--	--	--	--	--
	71-03-04	--	--	--	--	--	--	--	--	--
	71-08-05	.00	--	--	--	--	--	--	--	--
	73-09-11	--	--	--	--	--	--	552	--	22.8
	73-09-11	.00	314	280	32	6	.2	552	7.0	22.8
AY-68-27-511	71-03-03	.00	--	--	--	--	--	--	--	--
	71-04-28	--	--	--	--	--	--	493	--	--
	73-11-07	--	--	--	--	--	--	--	--	22.0
	73-11-07	.02	284	260	32	5	.2	508	6.9	22.0
AY-68-27-511	71-08-05	--	--	--	--	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STEP- TOCOCCT (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AY-68-27-302	72-04-05	--	0	0	0	--	--
	72-04-05	--	0	0	0	--	.0
	72-05-09	--	0	0	2	--	--
	72-05-09	--	0	0	1	--	--
	74-10-09	--	0	0	0	--	--
AY-68-27-401	71-04-12	--	2300	0	23	--	--
AY-68-27-503	69-07-18	.2	0	--	--	--	--
	71-04-07	--	0	0	0	--	.0
	71-04-05	--	30	0	0	--	.0
	72-01-27	--	0	0	0	--	--
	72-04-04	--	1	0	0	--	--
	72-05-04	--	0	0	0	--	--
	72-08-23	--	0	0	2	--	--
	72-08-23	--	0	0	2	--	.0
	72-12-14	--	0	0	0	--	--
	73-04-25	--	0	0	0	--	.0
	74-09-18	--	0	0	0	3.4	--
	74-12-03	--	0	0	0	.2	--
	69-07-18	.1	0	--	--	--	--
	71-03-03	.6	1400	0	0	--	.0
	72-01-27	--	9	0	0	--	.0
AY-68-27-504	72-01-27	--	5	0	1	--	.0
	72-01-27	--	6	0	0	--	.0
	72-01-27	--	0	0	0	--	.0
	72-04-04	--	510	0	0	--	--
	72-04-05	--	1100	0	0	--	--
	72-04-12	--	0	0	0	--	--
	72-05-09	--	1400	250	110	--	--
	72-04-24	--	98	34	2600	--	.0
	72-12-14	--	0	0	0	--	--
	73-04-11	--	0	0	0	--	.0
	74-02-22	--	15	0	0	3.0	--
	74-09-18	--	760	42	62	--	--
	74-09-18	--	261	28	40	1.1	--
	69-07-18	.5	6	--	--	--	--
	69-07-18	.4	0	--	--	--	--
AY-68-27-506	71-04-28	--	950	22	49	--	--
AY-68-27-507	71-06-03	--	19000	1	3	--	.0
	71-06-03	.2	5400	0	0	--	.0
	71-06-03	--	1000	0	0	--	.0
	71-06-03	.2	500	0	0	--	.0
	71-06-03	1.1	64	0	0	--	.0
	72-04-04	--	0	0	0	--	.0
	72-04-04	--	0	0	0	--	--
	72-04-10	--	5	0	1	--	--
	72-05-10	--	220	3	22	--	.0
	73-04-25	--	22000	150	640	--	--
	73-04-25	--	12000	96	6400	--	.0
	73-11-07	--	81	0	0	--	--
	73-11-07	--	37	0	0	.0	--
	74-09-18	--	480	0	4	<.1	--
AY-68-27-508	69-09-15	.4	3	0	0	--	--
	71-08-05	--	10	0	0	--	.0
	73-04-11	--	0	0	0	--	--
	73-04-11	--	0	0	0	--	.0
	74-09-18	--	0	0	0	2.5	--
AY-68-27-509	69-09-15	.3	225	3	7	--	--
	71-02-17	2.1	1400	0	0	--	.0
	71-02-17	--	3500	0	0	--	--
	71-02-17	1.7	1800	1	0	--	.0
	71-02-17	--	6500	0	7	--	--
	71-03-03	--	820	0	0	--	.0
	71-03-03	--	2000	0	1	--	.0
	71-03-03	--	300	0	0	--	.0
	71-03-03	--	660	0	0	--	.0
	71-03-03	--	540	0	0	--	.0
	71-03-03	--	400	0	0	--	.0
	71-03-03	--	420	0	0	--	.0
	71-03-03	--	210	0	0	--	.0
	71-03-04	--	460	0	1	--	--
	71-03-04	--	150	0	2	--	--
AY-68-27-510	71-03-04	--	240	0	0	--	--
	71-03-04	--	330	0	0	--	--
	71-04-05	--	5800	130	280	--	.0
	73-09-11	--	120	2	71	--	--
	73-04-11	--	33	10	40	--	.0
AY-68-27-511	71-03-03	.2	0	0	0	--	.0
	71-04-28	--	15	0	0	--	.0
	73-11-07	--	0	0	0	--	--
	73-11-07	--	3	0	0	.0	--
AY-68-27-511	71-08-05	--	32	1	0	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- I- FIELD	DATE OF SAMPLE	TIME	PUMP ON FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72006)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA FLOW (MG/L) (00955)	DIS- SOLVED CAL- CIUM (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00925)	DIS- SOLVED SODIUM (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
AY-68-27-511	71-08-05	1300	60	365	7.0	11	86	14	--	5.7
AY-68-27-612	71-08-04	1010	10	389	15	--	--	--	--	--
	71-08-04	1100	60	389	15	11	83	14	--	4.8
AY-68-27-613	71-08-04	--	10	360	20	--	--	--	--	--
	71-08-04	1810	60	360	20	11	86	13	--	6.0
	71-08-11	1300	10	360	20	--	--	--	--	--
	71-08-11	1350	60	360	20	--	--	--	--	--
	72-01-27	1340	10	360	20	--	--	--	--	--
	72-01-27	1430	60	360	20	--	--	--	--	--
	72-04-04	1330	10	360	20	--	--	--	--	--
	72-04-04	1430	60	360	20	--	--	--	--	--
AY-68-27-604	72-04-06	1305	10	363	12	--	--	--	--	--
	72-04-06	1355	60	363	12	15	84	14	--	8.7
AY-68-27-605	72-04-06	1410	10	305	36	--	--	--	--	--
	72-04-06	1500	60	305	36	16	88	15	--	7.8
	72-05-10	1125	10	305	--	--	--	--	--	--
	72-05-10	1215	60	305	30	12	86	14	5.5	--
AY-68-27-606	72-08-24	1230	many hrs	603	150	12	97	13	4.9	--
	72-12-14	--	9	603	1800	--	--	--	--	--
	73-02-15	--	5	603	1750	12	84	14	6.2	--
	73-04-19	0900	15	1450	--	--	--	--	--	--
	73-04-26	--	10	603	--	11	82	15	--	--
	73-11-08	1750	5	603	1750	12	82	14	4.2	--
	74-10-09	1100	5	603	1850	13	80	12	5.8	--
AY-68-28-103	71-04-06	1520	15	401	5.0	--	--	--	--	--
	71-04-06	1605	60	401	5.0	12	94	11	--	2.3
	74-03-13	1415	10	401	5.0	--	--	--	--	--
	74-03-13	1515	60	401	5.0	--	96	9.1	7.1	--
AY-68-28-201	69-09-19	--	10	387	8.0	11	92	9.8	--	5.7
	70-04-02	--	10	387	8.0	--	--	--	--	--
	71-02-17	0910	10	387	8.0	--	--	--	--	--
	71-02-17	0940	40	387	8.0	--	92	9.7	--	--
AY-68-28-202	70-04-02	--	many hrs	457	125	10	86	14	6.9	--
	72-04-04	1600	many hrs	457	125	--	--	--	--	--
	72-08-22	1810	600	457	125	--	--	--	--	--
	72-08-24	1635	10	457	125	--	--	--	--	--
	72-12-14	--	several hrs	457	124	--	--	--	--	--
	73-04-26	--	10	457	--	--	96	16	--	--
	74-09-17	1300	10	457	125	13	100	7.8	6.7	--
AY-68-28-203	70-04-02	--	several hrs	435	350	11	80	14	5.7	--
	72-04-04	1630	--	435	350	--	--	--	--	--
	72-08-22	1000	60	435	350	13	83	11	5.0	--
	72-08-24	1530	10	435	350	--	--	--	--	--
	72-12-14	1530	10	435	350	--	--	--	--	--
	73-04-24	1036	10	435	350	--	84	13	--	--
	73-09-12	--	10	435	435	--	--	--	--	--
	73-11-20	1325	10	435	350	--	--	--	--	--
	73-11-20	1355	40	435	350	--	--	--	--	--
	73-11-20	1445	90	435	350	--	--	--	--	--
AY-68-28-205	74-09-17	1138	10	435	350	14	100	7.2	6.3	--
	72-08-22	1635	10	485	285	--	--	--	--	--
	72-08-22	1725	60	485	285	14	170	13	5.9	--
	72-08-24	1600	10	485	285	--	--	--	--	--
	73-04-24	--	10	485	285	--	120	16	--	--
	73-09-12	--	10	--	285	--	--	--	--	--
	73-11-20	0945	10	485	285	--	--	--	--	--
	73-11-20	1015	40	485	285	--	--	--	--	--
	73-11-20	1105	90	485	285	--	--	--	--	--
	74-09-17	1215	10	485	285	13	90	15	4.5	--
AY-68-28-301	69-10-13	--	many hrs	400	30	12	84	9.6	3.9	--
AY-68-28-302	69-10-13	--	10	442	40	12	80	9.6	3.0	--
	69-12-03	--	10	442	40	--	--	--	--	--
AY-68-28-401	71-04-06	--	60	500	1000	12	67	12	--	3.0
	72-08-24	1400	210	500	1000	--	--	--	--	--
AY-68-28-402	71-04-06	0815	15	320	15	--	--	--	--	--
	71-04-06	0900	60	320	15	13	72	18	--	--
AY-68-28-403	71-04-29	--	many hrs	600	10	--	74	19	--	--
AY-68-28-501	70-04-02	--	10	469	100	10	88	14	6.9	--
	73-09-12	--	10	469	--	13	91	7.1	5.4	--
AY-68-28-502	74-09-17	1320	10	468	120	13	100	5.9	5.8	--
	68-09-11	--	many hrs	506	100	11	81	12	5.4	--
	70-04-02	--	10	506	110	--	--	--	--	--
	72-04-04	1750	many hrs	506	110	--	--	--	--	--
	72-08-22	1900	660	506	110	13	88	15	5.6	--
	72-08-24	1710	10	506	110	--	--	--	--	--
	72-12-14	--	10	506	110	--	--	--	--	--
	73-04-24	1630	10	506	110	--	76	24	--	--
	73-09-12	--	many hrs	506	110	--	--	--	--	--
	74-09-17	1355	10	506	110	13	90	26	5.7	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- I- FIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (*) (MG/L) (00935)	BICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLOR- IDE (CL) (MG/L) (00940)	DIS- SOLVED FLUOR- IDE (F) (MG/L) (00950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
AY-68-27-511	71-08-05	--	292	0	14	15	.2	--	2.5	.00
AY-68-27-602	71-08-04	--	--	--	--	--	--	--	--	--
	71-08-04	--	288	0	12	13	.2	--	2.1	.00
AY-68-27-603	71-08-04	--	--	--	--	--	--	--	--	--
	71-08-04	--	294	0	14	13	.2	--	1.8	.00
	71-08-11	--	--	--	--	--	--	--	--	--
	71-08-11	--	--	--	14	12	--	--	2.0	.00
	72-01-27	--	--	--	--	--	--	--	--	--
	72-01-27	--	--	--	--	--	--	--	--	--
	72-04-04	--	--	--	--	--	--	--	--	--
	72-04-04	--	--	--	--	--	--	--	--	--
AY-68-27-604	72-04-06	--	--	--	--	12	--	--	--	--
	72-04-06	--	300	0	14	12	.2	--	2.2	.00
AY-68-27-605	72-04-06	--	--	--	--	11	--	--	--	--
	72-04-06	--	318	0	12	11	.2	--	2.5	.00
	72-05-10	--	--	--	--	--	--	--	--	--
	72-05-10	1.1	305	0	12	11	.2	--	2.1	--
AY-68-27-606	72-08-24	1.9	307	0	14	24	.2	--	1.6	.00
	72-12-14	--	--	--	--	--	--	--	--	.00
	73-02-15	1.3	298	0	18	10	.2	--	1.4	.00
	73-04-19	--	--	--	--	--	--	--	1.7	.00
	73-04-26	--	288	0	17	9.8	.2	--	1.5	.00
	73-11-08	1.2	290	0	14	9.4	.1	--	1.7	.00
	74-10-09	.9	289	0	15	11	--	--	1.6	.07
AY-68-28-103	71-04-06	--	--	--	--	--	--	--	--	--
	71-04-06	--	304	0	14	9.6	.2	--	2.0	.00
	74-03-13	--	--	--	--	--	--	--	--	--
	74-03-13	1.0	310	0	22	11	.1	--	--	--
AY-68-28-201	69-09-19	--	298	0	15	11	.1	--	1.9	--
	70-04-02	--	--	--	--	--	--	--	2.5	.00
	71-02-17	--	--	--	--	--	--	--	2.7	.00
	71-02-17	--	292	0	16	11	--	--	--	--
AY-68-28-202	70-04-02	1.2	292	0	26	9.3	.1	--	1.0	.00
	72-04-04	--	--	--	--	8.8	--	--	--	--
	72-08-22	--	--	--	--	--	--	--	.90	.00
	72-08-24	--	--	--	--	--	--	--	--	--
	72-12-14	--	--	--	--	--	--	--	--	--
	73-04-26	--	322	0	23	11	--	--	.90	.00
	74-09-17	.8	307	0	17	13	--	--	.91	.12
AY-68-28-203	70-04-02	1.1	290	0	16	9.0	.1	--	.90	.00
	72-04-04	--	--	--	--	8.3	--	--	--	--
	72-08-22	1.8	298	0	11	8.4	.2	--	.90	.00
	72-08-24	--	--	--	--	--	--	--	--	--
	72-12-14	--	--	--	--	--	--	--	--	--
	73-04-24	--	288	0	15	8.2	--	--	.80	.00
	73-09-12	--	--	--	--	--	--	--	.90	.00
	73-11-20	--	--	--	--	--	--	--	--	--
	73-11-20	--	304	0	--	--	--	--	--	--
	73-11-20	--	--	--	--	--	--	--	.90	.00
AY-68-28-205	74-09-17	.8	317	0	8.7	15	--	--	.86	.05
	72-08-22	--	--	--	--	--	--	--	--	--
	72-08-22	1.4	377	0	6.4	130	.1	--	.30	.00
	72-08-24	--	388	0	4.4	110	--	--	.30	.00
	73-04-24	--	340	0	9.2	61	--	--	.40	.00
	73-09-12	--	--	--	--	--	--	--	.40	.00
	73-11-20	--	--	--	--	--	--	--	--	--
	73-11-20	--	--	--	--	--	--	--	--	--
	73-11-20	--	298	0	--	--	--	--	.50	.00
	74-09-17	.6	314	0	9.5	13	--	--	.67	.03
AY-68-28-301	69-10-13	1.1	252	0	34	9.0	.1	--	1.1	--
AY-68-28-302	69-10-13	1.4	270	0	13	7.2	.1	--	.60	--
	69-12-03	--	--	--	--	--	--	--	--	--
AY-68-28-401	71-04-06	--	228	0	13	10	.2	--	2.3	.00
	72-08-24	--	--	--	--	--	--	--	2.1	.00
AY-68-28-402	71-04-06	--	--	--	--	--	--	--	--	--
	71-04-06	--	288	0	6.4	8.5	.2	--	--	--
AY-68-28-403	71-04-29	--	292	0	8.4	10	--	--	--	--
AY-68-28-501	70-04-02	1.2	294	0	29	8.8	.1	--	--	--
	73-09-12	1.2	302	0	8.4	11	.2	--	.60	.00
	74-09-17	.9	310	0	6.3	13	--	--	.62	.10
AY-68-28-502	68-09-11	1.0	284	0	16	9.8	.2	.01	.95	.00
	70-04-02	--	--	--	--	--	--	--	.90	.00
	72-04-04	--	--	--	--	9.2	--	--	--	--
	72-08-22	.9	317	0	16	9.2	.2	--	.90	.00
	72-08-24	--	--	--	--	--	--	--	--	--
	72-12-14	--	--	--	--	--	--	--	--	--
	73-04-24	--	300	0	30	11	--	--	1.8	.00
	73-09-12	--	--	--	--	--	--	--	.70	.00
	74-09-17	2.1	340	0	54	11	--	--	1.3	.06

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (000665)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CALMG) (MG/L) (00907)	NON- CAL- HONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
AY-68-27-611	71-08-05	.00	301	270	33	--	--	524	7.7	--
AY-68-27-602	71-08-04	--	--	--	--	--	--	--	--	--
	71-08-04	.00	289	270	29	--	--	509	7.8	--
AY-68-27-603	71-08-04	--	--	--	--	--	--	--	--	--
	71-08-04	.00	296	270	27	--	--	519	7.7	--
	71-08-11	--	--	--	--	--	--	--	--	--
	71-08-11	.00	--	--	--	--	--	--	--	--
	72-01-27	--	--	--	--	--	--	544	--	--
	72-01-27	--	--	--	--	--	--	542	--	--
	72-04-04	--	--	--	--	--	--	557	--	--
	72-04-04	--	--	--	--	--	--	554	--	--
AY-68-27-604	72-04-06	--	--	--	--	--	--	529	--	22.0
	72-04-06	.00	306	270	21	--	--	528	7.3	22.0
AY-68-27-605	72-04-06	--	--	--	--	--	--	549	--	23.0
	72-04-06	.01	317	280	21	--	--	546	7.3	23.0
	72-05-10	--	--	--	--	--	--	536	--	23.0
	72-05-10	.01	294	270	20	4	.1	530	7.1	23.0
AY-68-27-606	72-08-24	.00	319	300	44	3	.1	574	7.4	24.5
	72-12-14	--	--	--	--	--	--	505	--	22.0
	73-02-15	.00	293	270	23	5	.2	--	--	--
	73-04-19	.00	--	--	--	--	--	515	--	22.6
	73-04-26	.00	--	270	30	--	--	503	7.1	22.8
	73-11-08	.00	280	260	25	3	.1	494	7.0	23.0
	74-10-09	.00	281	250	13	5	.2	501	7.4	24.5
AY-68-28-103	71-04-06	--	--	--	--	--	--	--	--	--
	71-04-06	.00	301	280	31	--	--	524	7.6	22.0
	74-03-13	--	--	--	--	--	--	550	--	22.0
	74-03-13	--	--	280	23	5	.2	546	6.5	22.0
AY-68-28-201	69-09-19	--	300	270	26	--	--	514	7.5	23.0
	70-04-02	.00	--	--	--	--	--	--	--	23.0
	71-02-17	.00	--	--	--	--	--	--	--	--
	71-02-17	--	--	270	30	--	--	514	7.2	--
AY-68-28-202	70-04-02	.00	299	270	33	5	.2	524	7.2	22.0
	72-04-04	--	--	--	--	--	--	504	--	--
	72-08-22	.00	--	--	--	--	--	525	--	23.0
	72-08-24	--	--	--	--	--	--	546	--	23.5
	72-12-14	--	--	--	--	--	--	489	--	22.0
	73-04-26	.00	--	310	41	--	--	553	7.1	22.6
	74-09-17	.01	310	280	30	5	.2	520	7.3	24.5
AY-68-28-203	70-04-02	.00	282	260	20	5	.2	502	7.2	--
	72-04-04	--	--	--	--	--	--	492	--	--
	72-08-22	--	281	250	8	4	.1	513	7.2	23.0
	72-08-24	--	--	--	--	--	--	525	--	24.5
	72-12-14	--	--	--	--	--	--	480	--	23.0
	73-04-24	.00	--	260	27	--	--	481	6.9	23.2
	73-09-12	.00	--	--	--	--	--	562	6.8	23.8
	73-11-20	--	--	--	--	--	--	532	--	23.0
	73-11-20	--	--	--	--	--	--	510	6.7	23.0
	73-11-20	.01	--	--	--	--	--	512	--	23.0
AY-68-28-205	74-09-17	.01	308	280	20	5	.2	532	7.3	24.0
	72-08-22	--	--	--	--	--	--	1000	--	--
	72-08-22	.00	527	480	170	3	.1	1030	7.3	--
	72-08-24	.00	--	--	--	--	--	934	7.3	23.0
	73-04-24	.00	--	370	97	--	--	708	7.0	23.6
	73-09-12	.01	--	--	--	--	--	559	7.1	23.8
	73-11-20	--	--	--	--	--	--	538	--	23.0
	73-11-20	--	--	--	--	--	--	537	--	23.2
	73-11-20	.02	--	--	--	--	--	528	6.8	23.2
	74-09-17	.01	300	290	29	3	.1	502	7.4	24.5
AY-68-28-301	69-10-13	.01	278	250	43	3	.1	489	7.1	23.0
AY-68-28-302	69-10-13	.01	259	240	18	3	.1	461	7.2	23.0
	69-12-03	--	--	--	--	--	--	--	--	22.0
AY-68-28-401	71-04-06	.01	239	220	30	--	--	426	7.5	23.0
	72-08-24	.00	--	--	--	--	--	508	--	25.5
AY-68-28-402	71-04-06	--	--	--	--	--	--	--	--	22.0
	71-04-06	--	--	250	18	--	--	469	7.7	22.0
AY-68-28-403	71-04-29	--	--	260	24	--	--	493	7.3	--
AY-68-28-501	70-04-02	--	303	280	36	5	.2	521	7.3	21.5
	73-09-12	.01	286	260	9	4	.1	508	7.4	22.5
AY-68-28-502	74-09-17	.01	298	270	20	4	.2	509	7.3	24.0
	68-09-11	.01	277	250	19	4	.1	486	7.6	26.0
	70-04-02	.00	--	--	--	--	--	--	--	--
	72-04-04	--	--	--	--	--	--	526	--	--
	72-08-22	.00	307	280	21	4	.1	561	7.1	23.5
	72-08-24	--	--	--	--	--	--	541	--	24.0
	72-12-14	--	--	--	--	--	--	--	--	23.0
	73-04-24	.00	--	290	43	--	--	551	6.9	23.4
	73-09-12	.01	--	--	--	--	--	621	6.9	23.8
	74-09-17	.01	376	340	61	4	.1	617	7.5	24.5

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

BEXAR COUNTY--CONTINUED

LOCAL IDENTI- FIER	DATE OF SAMPLE	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOC- CI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AY-68-27-511	71-08-05	--	19	0	0	--	.0
AY-68-27-602	71-08-04	--	230	0	0	--	--
	71-08-04	--	2300	0	1	--	.0
*AY-68-27-603	71-08-04	--	3900	500	820	--	--
	71-08-04	--	2500	230	580	--	.0
	71-08-11	--	260	18	22	--	--
	71-08-11	--	160	21	24	--	.0
	72-01-27	--	100	0	0	--	--
	72-01-27	--	350	0	0	--	--
	72-04-04	--	0	0	0	--	--
	72-04-04	--	0	0	0	--	--
AY-68-27-604	72-04-06	--	0	0	0	--	--
	72-04-06	--	0	0	0	--	.0
AY-68-27-605	72-04-06	--	0	0	0	--	--
	72-04-06	--	0	0	0	--	.0
	72-05-10	--	1900	120	460	--	--
	72-05-10	--	3100	68	110	--	.0
AY-68-27-606	72-08-24	--	0	0	3	--	.0
	72-12-14	--	0	0	0	--	--
	73-02-15	--	0	0	0	--	.0
	73-04-19	--	0	0	0	--	.0
	73-04-26	--	0	0	0	--	.0
	73-11-08	--	0	0	0	1.5	--
	74-10-09	--	0	0	0	1.6	--
AY-68-28-103	71-04-06	--	1	0	0	--	--
	71-04-06	.5	0	0	0	--	.0
	74-03-13	--	0	0	0	--	--
	74-03-13	--	0	0	0	2.0	--
AY-68-28-201	69-09-19	--	--	--	--	--	--
	70-04-02	.0	76	0	0	--	--
	71-02-17	.8	36	0	0	--	.0
	71-02-17	--	62	0	0	--	--
AY-68-28-202	70-04-02	.0	2	0	0	--	--
	72-04-04	--	0	0	0	--	--
	72-08-22	--	0	0	7	--	.0
	72-08-24	--	0	0	10	--	--
	72-12-14	--	0	0	0	--	--
	73-04-26	--	6	0	0	--	.0
	74-09-17	--	0	0	0	2.3	--
AY-68-28-203	70-04-02	.0	0	0	0	--	--
	72-04-04	--	0	0	0	--	--
	72-08-22	--	0	0	0	--	.0
	72-08-24	--	0	0	0	--	--
	72-12-14	--	0	0	0	--	--
	73-04-24	--	0	0	0	--	.0
	73-04-12	--	0	0	0	--	.0
	73-11-20	--	0	0	0	--	--
	73-11-20	--	0	0	0	--	--
	73-11-20	--	0	0	0	--	--
	74-09-17	--	0	0	0	2.1	--
AY-68-28-205	72-08-22	--	0	0	0	--	--
	72-08-22	--	0	0	0	--	.0
	72-08-24	--	0	0	0	--	.0
	73-04-24	--	0	0	0	--	.0
	73-09-12	--	0	0	1	--	.0
	73-11-20	--	0	0	0	--	--
	73-11-20	--	1	0	0	--	--
	73-11-20	--	1	0	0	--	--
	74-09-17	--	0	0	0	1.6	--
AY-68-28-301	69-10-13	.2	7	0	0	--	--
AY-68-28-302	69-10-13	.1	2300	130	110	--	--
	69-12-03	--	380	0	5	--	--
AY-68-28-401	71-04-06	.4	0	0	0	--	.0
	72-08-24	--	0	0	0	--	.0
AY-68-28-402	71-04-06	--	35	0	8	--	--
	71-04-06	.5	24	0	1	--	.0
AY-68-28-403	71-04-29	--	--	--	--	--	.0
AY-68-28-501	70-04-02	--	--	--	--	--	--
	73-09-12	--	0	0	0	--	.0
	74-09-17	--	0	0	0	1.4	--
AY-68-28-502	68-09-11	.8	--	0	--	--	.0
	70-04-02	.0	11	0	0	--	--
	72-04-04	--	0	0	0	--	--
	72-08-22	--	0	0	0	--	.0
	72-08-24	--	0	0	0	--	--
	72-12-14	--	8	0	0	--	--
	73-04-24	--	0	0	0	--	.0
	73-09-12	--	0	0	0	--	.0
	74-09-17	--	9	0	4	2.0	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP ON FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
AY-68-28-505	69-11-12	--	15	456	10	13	98	6.2	2.3	--
	71-08-04	1010	10	456	10	--	--	--	--	--
	71-08-04	1100	60	456	10	--	--	--	--	--
	71-08-11	1210	10	456	10	--	--	--	--	--
	71-08-11	1300	60	456	10	--	--	--	--	--
	72-01-27	--	30	456	10	--	--	--	--	--
	72-04-05	1340	10	456	10	--	--	--	--	--
	72-04-05	1430	60	456	10	--	--	--	--	--
	72-12-13	1410	10	456	10	--	--	--	--	--
	72-12-13	1500	60	456	10	--	--	--	--	--
	74-10-09	1250	10	456	10	12	100	4.9	5.6	--
	70-04-02	--	10	490	20	9.0	100	3.5	4.4	--
AY-68-28-506	71-02-03	--	10	490	20	--	--	--	--	--
	71-03-04	--	40	490	20	--	--	--	--	--
	73-05-08	1345	--	396	300	--	68	14	5.1	--
AY-68-28-508	75-01-21	1225	240	396	300	11	65	14	5.1	--
	73-05-08	1300	many hrs	400	75	--	68	19	4.9	--
	75-01-21	1150	240	400	75	12	70	17	4.9	--
AY-68-28-510	73-05-08	1545	1440	400	200	--	76	13	4.8	--
AY-68-28-601	69-12-03	--	10	425	50	14	88	8.1	16	--
AY-68-28-602	69-11-12	--	15	391	10	14	120	5.4	8.5	--
	72-04-05	1410	10	377	15	--	--	--	--	--
	72-04-05	1700	60	377	15	16	92	6.4	--	6.4
AY-68-28-604	72-04-05	1525	10	344	10	--	--	--	--	--
	72-04-05	1625	60	344	10	17	95	6.0	--	6.0
AY-68-28-762	69-11-12	--	15	450	1000	12	84	16	8.5	--
	71-08-04	--	many hrs	450	1000	--	--	--	--	--
AY-68-28-703	69-11-12	--	10	300	15	12	78	15	7.1	--
AY-68-28-903	68-10-30	--	10	762	3500	13	91	14	5.4	--
	71-04-06	1400	several hrs	762	3500	14	100	13	--	8.3
AY-68-29-102	73-12-04	1130	several hrs	762	--	16	130	14	20	--
	71-02-03	1130	many hrs	525	80	--	84	18	--	--
	71-08-04	--	many hrs	602	140	12	79	23	--	3.7
	71-08-06	--	many hrs	602	120	--	--	--	--	--
	71-08-11	--	several hrs	602	120	--	--	--	--	--
AY-68-29-104	72-01-26	1415	10	602	400	--	--	--	--	--
	72-01-26	1445	40	602	400	--	--	--	--	--
	72-01-26	1535	90	602	400	--	--	--	--	--
	72-02-09	0935	10	602	400	--	--	--	--	--
	72-02-09	1005	40	602	400	--	--	--	--	--
	72-02-09	1055	40	602	400	--	--	--	--	--
	72-02-09	1155	150	602	400	--	--	--	--	--
	72-02-09	1255	210	602	400	--	--	--	--	--
	72-02-24	1025	10	602	400	--	--	--	--	--
	72-02-24	1055	40	602	400	--	--	--	--	--
	72-02-24	1145	90	602	400	--	--	--	--	--
	72-02-24	1215	120	602	400	--	--	--	--	--
AY-68-29-104	72-02-24	1245	150	602	400	--	--	--	--	--
	72-02-24	1345	210	602	400	--	--	--	--	--
	72-03-23	0910	10	602	400	--	--	--	--	--
	72-03-23	0940	40	602	400	--	--	--	--	--
	72-03-23	1030	90	602	400	--	--	--	--	--
	72-03-23	1130	150	602	400	--	--	--	--	--
	72-03-23	1230	210	602	400	--	--	--	--	--
	72-03-23	1330	270	602	400	--	--	--	--	--
	72-03-23	1400	300	602	400	--	--	--	--	--
	72-03-23	1430	330	602	400	--	--	--	--	--
	72-03-23	1500	360	602	400	--	--	--	--	--
	72-03-30	0940	10	602	--	--	--	--	--	--
AY-68-29-104	72-03-30	1010	40	602	400	--	--	--	--	--
	72-03-30	1100	90	602	400	--	--	--	--	--
	72-03-30	1130	120	602	400	--	--	--	--	--
	72-03-30	1200	150	602	400	--	--	--	--	--
	72-03-30	1230	180	602	400	--	--	--	--	--
	72-03-30	1300	210	602	400	--	--	--	--	--
	72-03-30	1330	240	602	400	--	--	--	--	--
	72-03-30	1400	270	602	400	--	--	--	--	--
	72-03-30	1430	300	602	400	--	--	--	--	--
	72-03-30	1500	330	602	400	--	--	--	--	--
	72-03-30	1530	360	602	400	--	--	--	--	--
	72-03-30	1600	390	602	400	--	--	--	--	--
	72-03-30	1630	420	602	400	--	--	--	--	--
AY-68-29-104	72-03-30	1700	450	602	400	--	--	--	--	--
	72-03-30	1730	480	602	400	--	--	--	--	--
	72-03-30	1800	510	602	400	--	--	--	--	--
	72-03-30	1830	540	602	400	--	--	--	--	--
	72-05-09	0915	10	602	--	--	--	--	--	--
	72-05-09	1005	60	602	--	--	--	--	--	--
AY-68-29-104	72-09-26	0950	10	602	400	--	--	--	--	--
	72-09-26	1020	40	602	400	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
AY-68-28-505	69-11-12	1.0	312	0	5.6	8.4	.1	--	.70	--
	71-08-04	--	--	--	--	--	--	--	--	--
	71-08-04	--	318	0	6.0	10	--	--	.80	.00
	71-08-11	--	--	--	--	--	--	--	--	--
	71-08-11	--	--	--	--	--	--	--	.90	.00
	72-01-27	--	--	--	--	--	--	--	--	--
	72-04-05	--	--	--	--	10	--	--	--	--
	72-04-05	--	--	--	--	10	--	--	--	--
	72-12-13	--	--	--	--	--	--	--	--	--
	72-12-13	--	--	--	--	--	--	--	--	--
	74-10-09	.6	322	0	6.3	9.8	--	--	.80	.05
AY-68-28-506	70-04-02	1.0	288	0	13	7.8	.0	--	3.4	.00
	71-02-03	--	--	--	14	9.0	--	--	1.3	.00
	71-03-04	--	--	--	--	--	--	--	--	--
AY-68-28-508	73-05-08	.9	240	0	16	7.8	--	--	2.6	.00
	75-01-21	1.5	236	0	18	9.8	.2	--	2.7	.00
AY-68-28-509	73-05-08	.9	278	0	11	6.5	--	--	.90	.00
	75-01-21	1.1	280	0	9.7	10	.2	--	.88	.00
AY-68-28-510	73-05-08	.8	274	0	9.4	8.1	--	--	1.3	.00
AY-68-28-601	69-12-03	1.0	292	0	24	14	.2	--	1.1	.00
AY-68-28-602	69-11-12	1.4	352	0	13	17	.1	--	2.9	--
AY-68-28-603	72-04-05	--	--	--	--	9.1	--	--	--	--
	72-04-05	--	304	0	5.6	8.8	.1	--	.50	.00
AY-68-28-604	72-04-05	--	--	--	--	10	--	--	--	--
	72-04-05	--	304	0	6.4	10	.1	--	1.2	.00
AY-68-28-702	69-11-12	1.4	300	0	24	13	.2	--	1.6	--
	71-08-04	--	296	0	24	14	--	--	1.8	.00
AY-68-28-703	69-11-12	1.3	288	0	16	11	.2	--	1.2	--
AY-68-28-903	68-10-30	1.2	314	0	16	16	.2	--	1.2	--
	71-04-06	--	340	0	16	14	.2	--	1.7	.00
	73-12-04	1.7	440	0	24	23	.2	--	.62	.07
AY-68-29-102	71-02-03	--	304	0	24	10	--	--	.50	.00
AY-68-29-104	71-08-04	--	324	0	14	11	.3	--	.90	.00
	71-08-06	--	--	--	--	--	--	--	--	--
	71-08-11	--	312	0	14	9.0	--	--	.90	.00
	72-01-26	--	--	--	--	--	--	--	--	--
	72-01-26	--	--	--	--	--	--	--	--	--
	72-01-26	--	--	--	--	--	--	--	--	--
	72-02-09	--	--	--	--	--	--	--	--	--
	72-02-09	--	--	--	--	--	--	--	--	--
	72-02-09	--	--	--	--	--	--	--	--	--
	72-02-09	--	--	--	--	--	--	--	.80	.00
	72-02-24	--	--	--	--	10	--	--	.80	--
	72-02-24	--	--	--	--	--	--	--	.80	--
	72-02-24	--	--	--	--	10	--	--	--	--
	72-02-24	--	--	--	--	10	--	--	--	--
	72-02-24	--	--	--	--	10	--	--	--	--
	72-02-24	--	--	--	--	10	--	--	--	--
	72-03-23	--	--	--	--	9.0	--	--	1.0	--
	72-03-23	--	--	--	--	--	--	--	--	--
	72-03-23	--	--	--	--	10	--	--	--	--
	72-03-23	--	--	--	--	8.9	--	--	--	--
	72-03-23	--	--	--	--	8.7	--	--	--	--
	72-03-23	--	--	--	--	8.7	--	--	.80	.00
	72-03-23	--	--	--	--	9.0	--	--	--	--
	72-03-23	--	--	--	--	8.9	--	--	--	--
	72-03-23	--	--	--	--	8.7	--	--	.90	.00
	72-03-30	--	--	--	--	--	--	--	1.0	.00
	72-03-30	--	--	--	--	11	--	--	--	--
	72-03-30	--	--	--	--	10	--	--	--	--
	72-03-30	--	--	--	--	11	--	--	--	--
	72-03-30	--	--	--	--	10	--	--	--	--
	72-03-30	--	--	--	--	10	--	--	--	--
	72-03-30	--	--	--	--	10	--	--	.80	.00
	72-03-30	--	--	--	--	10	--	--	--	--
	72-03-30	--	--	--	--	10	--	--	--	--
	72-03-30	--	--	--	--	9.8	--	--	--	--
	72-03-30	--	--	--	--	9.7	--	--	--	--
	72-03-30	--	--	--	--	9.8	--	--	--	--
	72-03-30	--	--	--	--	9.8	--	--	--	--
	72-03-30	--	--	--	--	9.4	--	--	--	--
	72-03-30	--	--	--	--	9.8	--	--	--	--
	72-03-30	--	--	--	--	9.5	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--

BEXAR COUNTY--CONTINUED

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AY-68-28-505	69-11-12	.2	0	0	0	--	--
	71-08-04	--	1100	20	46	--	--
	71-08-04	--	310	18	15	--	.0
	71-08-11	--	0	0	0	--	--
	71-08-11	--	2	0	1	--	.0
	72-01-27	--	0	0	0	--	--
	72-04-05	--	8	0	0	--	--
	72-04-05	--	2	0	0	--	--
	72-12-13	--	0	0	0	--	--
	72-12-13	--	0	0	0	--	--
AY-68-28-506	74-10-09	--	0	0	0	.0	--
	70-04-02	.0	210	2	2	--	--
	71-02-03	.3	45	0	0	--	.0
	71-03-04	--	840	4	3	--	--
AY-68-28-508	73-05-08	--	0	0	0	--	.0
AY-68-28-509	75-01-21	--	0	0	0	2.4	--
	73-05-08	--	0	0	0	--	.0
	75-01-21	--	0	0	0	4.6	--
AY-68-28-510	73-05-08	--	--	--	--	--	.0
AY-68-28-601	69-12-03	.2	0	0	0	--	--
AY-68-28-602	69-11-12	.2	24	0	0	--	--
AY-68-28-603	72-04-05	--	13	0	0	--	--
	72-04-05	--	2	0	0	--	.0
AY-68-28-604	72-04-05	--	47	0	0	--	--
	72-04-05	--	570	0	0	--	.0
AY-68-28-702	69-11-12	.1	1	0	0	--	--
AY-68-28-703	71-08-04	--	83	0	0	--	.0
	69-11-12	.2	4	0	0	--	--
AY-68-28-903	68-10-30	--	--	--	--	--	--
	71-04-06	.6	0	0	0	--	.0
AY-68-29-102	73-12-04	--	0	0	0	--	.0
	71-02-03	.9	0	0	0	--	.0
AY-68-29-104	71-08-04	--	3600	33	170	--	.0
	71-08-06	--	2000	200	140	--	--
	71-08-11	--	79	2	5	--	.0
	72-01-26	--	620	0	0	--	--
	72-01-26	--	350	0	0	--	--
	72-01-26	--	180	0	0	--	--
	72-02-09	--	340	0	0	--	--
	72-02-09	--	80	0	0	--	--
	72-02-09	--	56	0	0	--	--
	72-02-09	--	15	0	0	--	.0
	72-02-09	--	140	0	0	--	--
	72-02-24	--	64	0	0	--	.0
	72-02-24	--	64	0	0	--	.0
	72-02-24	--	4	0	0	--	--
	72-02-24	--	4	0	0	--	--
	72-02-24	--	60	0	0	--	--
	72-02-24	--	120	0	0	--	--
	72-03-23	--	210	0	0	--	.0
	72-03-23	--	60	0	0	--	--
	72-03-23	--	12	0	0	--	--
	72-03-23	--	4	0	0	--	--
	72-03-23	--	8	0	0	--	--
	72-03-23	--	0	0	0	--	.0
	72-03-23	--	0	0	0	--	--
	72-03-23	--	60	0	0	--	--
	72-03-23	--	60	0	0	--	.0
	72-03-30	--	12	0	0	--	.0
	72-03-30	--	31	--	--	--	--
	72-03-30	--	9	--	--	--	--
	72-03-30	--	9	--	--	--	--
	72-03-30	--	14	--	--	--	--
	72-03-30	--	1	--	--	--	--
	72-03-30	--	0	--	--	--	.0
	72-03-30	--	2	--	--	--	--
	72-03-30	--	0	--	--	--	--
	72-03-30	--	13	--	--	--	--
	72-03-30	--	12	0	0	--	--
	72-03-30	--	0	--	--	--	--
	72-03-30	--	10	--	--	--	--
	72-03-30	--	11	--	--	--	--
	72-03-30	--	0	--	--	--	--
	72-03-30	--	5	--	--	--	--
	72-03-30	--	1	--	--	--	--
	72-03-30	--	4	0	1	--	--
	72-05-09	--	10000	380	960	--	--
	72-05-09	--	4100	64	540	--	--
	72-09-26	--	3200	3	43	--	--
	72-09-26	--	300	1	2	--	--

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

BEXAR COUNTY--CONTINUED										
LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA (MG/L) (00955)	DIS- SOLVED CAL- CIUM (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG/L) (00925)	DIS- SOLVED SODIUM (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
AY-68-29-104	72-09-26	1110	90	602	400	--	--	--	--	--
	72-09-26	1140	120	602	400	--	--	--	--	--
	72-09-26	1210	150	602	400	--	--	--	--	--
	72-09-26	1240	180	602	400	--	--	--	--	--
	72-09-26	1310	210	602	400	--	--	--	--	--
	72-09-26	1410	270	602	400	--	--	--	--	--
	72-12-13	1010	10	602	400	--	--	--	--	--
	72-12-13	1100	60	602	400	--	--	--	--	--
	73-05-07	1425	10	602	400	--	--	--	--	--
	73-05-07	1515	60	602	400	--	80	22	5.4	--
AY-68-29-105	69-11-12	--	10	285	10	13	110	3.4	5.2	--
	72-04-12	1520	10	285	10	--	--	--	--	--
	72-04-12	1540	30	285	10	--	--	--	--	--
	72-05-09	1115	10	285	10	--	--	--	--	--
	72-05-09	1135	30	285	10	--	--	--	--	--
AY-68-29-106	69-12-03	--	15	490	10	12	74	20	6.4	--
	71-08-10	1410	10	490	20	--	--	--	--	--
	71-08-10	1500	60	490	20	--	--	--	--	--
	72-12-13	--	10	490	20	--	--	--	--	--
AY-68-29-108	72-12-13	--	30	366	130	13	85	21	--	6.7
AY-68-29-109	73-05-07	1305	15	366	130	--	68	25	5.0	--
	70-05-07	1700	--	--	--	--	--	--	--	--
	73-05-07	1700	several hrs	460	--	--	96	11	6.6	--
	73-06-05	--	10	460	--	--	99	11	6.3	--
	73-09-13	--	several hrs	460	--	--	--	--	--	--
AY-68-29-110	75-01-21	0910	120	460	450	14	100	10	7.1	--
	73-12-06	1015	60	350	10	--	--	--	--	--
	68-09-11	--	--	235	10	12	80	19	4.2	--
	71-08-11	1510	10	239	10	--	--	--	--	--
AY-68-29-204	71-08-11	1600	60	239	10	--	--	--	--	--
	68-09-11	--	--	280	7.0	11	92	14	4.4	--
	71-08-11	--	10	280	7.0	--	--	--	--	--
	74-08-13	1335	30	280	7.0	13	95	15	5.0	--
AY-68-29-206	70-04-02	--	20	390	10	10	90	16	4.8	--
	71-08-03	0810	10	390	10	--	--	--	--	--
AY-68-29-302	71-08-03	0900	60	390	10	--	--	--	--	--
	69-12-03	--	10	385	10	12	94	10	4.1	--
	71-08-03	--	60	385	10	--	--	--	--	--
	71-08-03	1048	10	385	10	--	--	--	--	--
	73-05-09	1130	60	385	10	--	92	11	4.4	--
AY-68-29-303	72-08-23	1130	240	527	150	12	95	12	4.2	--
	72-12-13	--	240	527	150	--	--	--	--	--
	73-05-08	--	several hrs	527	150	--	96	12	4.3	--
	73-09-13	--	many hrs	527	150	--	--	--	--	--
	74-10-01	1315	240	527	150	12	92	11	4.5	--
AY-68-29-401	68-09-11	--	--	517	640	12	85	15	5.7	--
AY-68-29-403	75-01-21	1000	10	517	600	14	110	8.9	8.1	--
	68-09-11	--	--	340	10	12	110	8.8	5.8	--
	69-09-15	--	10	340	10	--	--	--	--	--
	70-04-02	--	10	340	10	--	--	--	--	--
	71-02-03	1400	10	340	10	--	--	9.5	--	--
	71-04-07	1310	10	340	10	--	--	--	--	--
	71-04-07	1400	60	340	10	--	--	--	--	--
	71-10-14	1150	30	--	--	--	--	--	--	--
	72-04-13	1240	10	340	10	--	--	--	--	--
	72-04-13	1330	60	340	10	--	110	8.8	--	--
AY-68-29-405	74-07-17	1345	60	340	10	--	--	--	--	--
	68-09-11	--	--	395	100	12	90	11	8.6	--
	74-08-13	1145	180	395	100	14	100	11	10	--
	68-09-11	--	--	349	25	12	99	8.4	10	--
AY-68-29-408	68-09-11	--	--	390	15	12	100	11	5.6	--
AY-68-29-409	69-04-02	--	60	460	6.0	13	98	12	--	2.5
	71-08-12	1330	30	460	6.0	--	--	--	--	--
	71-08-12	1400	80	460	6.0	--	--	--	--	--
AY-68-29-410	71-02-03	1000	10	318	620	--	--	16	--	--
	71-08-10	--	many hrs	318	620	--	--	--	--	--
	72-12-13	--	30	--	620	--	--	--	--	--
AY-68-29-501	73-05-07	1625	10	318	620	--	87	17	5.7	--
	69-01-11	--	10	350	10	14	110	11	--	6.2
	68-09-11	--	--	264	10	12	98	12	5.4	--
	70-04-02	--	7	264	10	--	--	--	--	--
AY-68-29-503	71-04-07	--	35	264	10	--	--	--	--	--
	68-09-11	--	10	349	10	11	90	11	4.4	--
	69-09-15	--	10	349	10	--	--	--	--	--
	70-04-02	--	10	349	10	--	--	--	--	--
	70-05-28	1240	10	349	10	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
AY-68-29-104	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-09-26	--	--	--	--	--	--	--	--	--
	72-12-13	--	--	--	--	--	--	--	--	--
	72-12-13	--	--	--	--	--	--	--	--	--
	73-05-07	--	--	--	--	--	--	--	--	--
	73-05-07	1.2	336	0	16	8.4	--	--	.80	.00
AY-68-29-105	69-11-12	.6	352	0	.0	9.2	.0	--	.50	--
	72-04-12	--	--	--	--	--	--	--	--	--
	72-04-12	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
	72-05-09	--	--	--	--	--	--	--	--	--
AY-68-29-106	69-12-03	1.0	308	0	12	11	.3	--	.30	.00
	71-08-10	--	--	--	--	--	--	--	.30	.00
	71-08-10	--	--	--	7.6	12	--	--	.40	.00
	72-12-13	--	--	--	--	--	--	--	--	--
AY-68-29-108	72-12-13	--	358	0	6.0	7.6	.2	--	.80	.10
AY-68-29-109	73-05-07	1.0	322	0	7.8	6.8	--	--	.60	.00
	70-05-07	--	--	--	--	--	--	--	--	--
	73-05-07	.9	330	0	8.4	12	--	--	1.1	.01
	73-06-05	.7	334	0	6.0	11	--	--	.96	.00
	73-09-13	--	--	--	--	--	--	--	1.0	.00
AY-68-29-110	75-01-21	.9	334	0	8.0	14	.1	--	1.3	.00
	73-12-06	--	--	--	--	--	--	--	1.4	.00
	68-09-11	.7	322	0	9.8	6.6	.1	.01	1.2	.00
	71-08-11	--	--	--	--	--	--	--	1.3	.00
AY-68-29-203	71-08-11	--	324	0	10	7.8	--	--	1.4	.00
AY-68-29-204	68-09-11	.9	332	0	9.6	7.0	.1	.01	1.8	.00
	71-08-11	--	--	--	9.6	7.6	--	--	1.6	.00
	74-08-13	.8	334	0	10	8.2	--	--	1.5	.01
AY-68-29-206	70-04-02	1.0	332	0	9.6	7.4	.1	--	2.2	.00
	71-08-03	--	--	--	--	--	--	--	--	--
AY-68-29-302	71-08-03	--	348	0	5.6	9.6	--	--	1.9	.00
	69-12-03	.7	320	0	8.4	6.8	.2	--	1.4	.00
	71-08-03	--	320	0	6.4	8.2	--	--	1.3	.00
	71-08-03	--	--	--	--	--	--	--	--	--
	73-05-09	.7	308	0	11	6.2	--	--	1.1	.00
AY-68-29-303	72-08-23	1.8	324	0	11	5.5	.1	--	1.9	.00
	72-12-13	--	--	--	--	--	--	--	--	--
	73-05-08	.9	330	0	11	6.3	--	--	1.9	.00
	73-09-13	--	--	--	--	--	--	--	1.8	.00
AY-68-29-401	74-10-01	.8	334	0	10	7.8	--	--	1.4	.03
AY-68-29-403	68-09-11	.6	326	0	8.0	9.6	.2	.01	.79	.00
	75-01-21	1.1	344	0	11	18	.1	--	1.5	.00
AY-68-29-405	68-09-11	1.0	368	0	15	7.8	.2	.01	.36	.00
	69-09-15	--	--	--	--	--	--	--	--	--
	70-04-02	--	--	--	--	--	--	--	.70	.00
	71-02-03	--	--	--	9.6	8.2	--	--	.70	.00
	71-04-07	--	--	--	--	--	--	--	--	--
AY-68-29-407	71-04-07	--	--	--	--	--	--	--	--	--
	71-10-14	--	--	--	--	--	--	--	--	--
	72-04-13	--	--	--	--	--	--	--	--	--
	72-04-13	--	364	0	9.6	8.2	--	--	.70	.13
	74-07-17	--	--	--	--	--	--	--	.63	.05
AY-68-29-409	74-07-17	--	--	--	--	--	--	--	.62	.01
	68-09-11	1.2	308	0	13	12	.1	.01	1.3	.00
	74-08-13	1.4	343	0	13	14	--	--	1.3	.15
	68-09-11	.6	324	0	17	14	1.3	.01	.66	.00
AY-68-29-408	68-09-11	1.0	344	0	7.2	8.0	.1	.01	.81	.00
AY-68-29-410	69-04-02	--	344	0	6.8	6.5	.1	--	.32	--
	71-08-12	--	--	--	--	--	--	--	--	--
	71-08-12	--	--	--	6.8	8.0	--	--	.70	.00
	71-02-03	--	--	--	6.2	10	--	--	.90	.00
AY-68-29-501	71-08-10	--	330	0	6.8	10	--	--	.90	.00
	72-12-13	--	--	--	--	--	--	--	--	--
	73-05-07	.9	332	0	7.2	8.5	--	--	1.0	.00
	69-01-11	--	372	0	6.8	7.8	.1	.01	1.3	.00
AY-68-29-502	68-09-11	1.0	350	0	7.2	8.6	.1	.01	.86	.00
	70-04-02	--	--	--	--	--	--	--	.90	.00
	71-04-07	--	--	--	--	--	--	--	--	--
AY-68-29-503	68-09-11	.7	320	0	4.8	6.6	.1	.01	.79	.00
	69-09-15	--	--	--	--	--	--	--	--	--
	70-04-02	--	--	--	--	--	--	--	.90	.00
	70-05-28	--	--	--	--	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
AY-68-29-104	72-09-26	--	--	--	--	--	--	575	--	23.0
	72-09-26	--	--	--	--	--	--	577	--	23.0
	72-09-26	--	--	--	--	--	--	575	--	23.0
	72-09-26	--	--	--	--	--	--	578	--	23.0
	72-09-26	--	--	--	--	--	--	577	--	23.0
	72-09-26	--	--	--	--	--	--	579	--	23.0
	72-12-13	--	--	--	--	--	--	567	--	22.0
	72-12-13	--	--	--	--	--	--	580	--	22.0
	73-05-07	.02	--	--	--	--	--	548	--	23.0
	73-05-07	.02	--	290	15	4	.1	548	7.0	23.0
	69-11-12	.00	316	290	0	4	.1	558	7.5	23.0
	72-04-12	--	--	--	--	--	--	554	--	23.0
	72-04-12	--	--	--	--	--	--	553	--	23.0
	72-05-09	--	--	--	--	--	--	539	--	23.5
	72-05-09	--	--	--	--	--	--	539	--	23.5
AY-68-29-105	69-12-03	.01	288	270	14	5	.2	517	7.6	23.5
	71-08-10	.00	--	--	--	--	--	--	--	--
	71-08-10	.00	--	--	--	--	--	--	--	--
	72-12-13	--	--	--	--	--	--	518	--	--
AY-68-29-108	72-12-13	.02	319	300	5	--	--	562	7.2	--
AY-68-29-109	73-05-07	.02	--	270	9	4	.1	519	7.0	23.2
	70-05-07	--	--	--	--	--	--	--	--	--
	73-05-07	.02	--	290	14	5	.2	552	--	23.0
	73-06-05	.01	--	290	19	4	.2	559	6.9	23.0
	73-09-13	.00	--	--	--	--	--	571	6.9	23.0
AY-68-29-110	75-01-21	.04	319	290	17	5	.2	543	6.8	23.5
	73-12-06	.00	--	--	--	--	--	520	--	23.2
	68-09-11	.02	291	280	14	3	.1	514	7.4	23.0
	71-08-11	.00	--	--	--	--	--	--	--	--
AY-68-29-203	71-08-11	.00	--	--	--	--	--	528	7.7	--
	71-08-11	.00	--	--	--	--	--	--	--	--
	71-08-11	.00	--	--	--	--	--	--	--	--
AY-68-29-204	68-09-11	.02	303	290	15	3	.1	535	7.3	24.0
	71-08-11	.00	--	--	--	--	--	--	--	--
	74-08-13	.04	312	300	25	4	.1	554	7.2	24.0
AY-68-29-206	70-04-02	.01	302	290	18	3	.1	548	7.3	22.5
	71-08-03	--	--	--	--	--	--	--	--	--
AY-68-29-302	71-08-03	.00	--	--	--	--	--	566	7.7	--
	69-12-03	.01	294	280	13	3	.1	522	7.8	22.5
	71-08-03	--	--	--	--	--	--	526	7.6	--
	71-08-03	--	--	--	--	--	--	--	--	--
	73-05-09	.01	--	280	22	3	.1	516	6.9	23.0
AY-68-29-303	72-08-23	.00	304	290	18	3	.1	552	7.5	23.5
	72-12-13	--	--	--	--	--	--	--	--	--
	73-05-08	.02	--	290	18	3	.1	539	6.9	22.3
	73-09-13	.09	--	--	--	--	--	557	6.7	22.5
	74-10-01	.02	303	280	1	3	.1	551	7.2	23.0
AY-68-29-401	68-09-11	.02	297	270	7	4	.1	525	7.3	24.0
AY-69-29-403	75-01-21	.05	341	310	29	5	.2	566	6.8	23.5
	68-09-11	--	343	310	9	4	.1	585	6.7	22.0
	69-05-15	--	--	--	--	--	--	--	--	--
	70-04-02	--	--	--	--	--	--	582	--	22.5
	71-02-03	.00	--	240	16	--	--	--	7.3	22.0
	71-04-07	--	--	--	--	--	--	--	--	22.0
	71-04-07	--	--	--	--	--	--	--	--	22.0
	71-10-14	--	--	--	--	--	--	554	--	22.0
	72-04-13	--	--	--	--	--	--	597	--	23.0
	72-04-13	.01	--	310	14	--	--	592	7.3	23.0
	74-07-17	.01	--	--	--	--	--	601	--	22.5
	74-07-17	.02	--	--	--	--	--	--	--	--
	68-09-11	.03	300	270	18	6	.2	572	7.6	24.0
	74-08-13	.03	333	300	14	7	.3	604	7.3	24.0
AY-68-29-407	68-09-11	.02	322	280	16	7	.3	548	7.5	22.0
AY-68-29-408	68-09-11	.02	315	300	13	4	.1	546	7.9	23.0
AY-68-29-409	69-04-02	.01	309	290	12	--	--	547	7.2	22.0
	71-08-12	--	--	--	--	--	--	--	--	--
	71-08-12	.00	--	--	--	--	--	--	--	--
AY-68-29-410	71-02-03	.00	--	--	--	--	--	--	--	21.5
	71-08-10	.00	--	--	--	--	--	537	7.7	23.0
	72-12-13	--	--	--	--	--	--	540	--	22.0
AY-68-29-501	73-05-07	.02	--	290	15	4	.1	--	--	--
	69-01-11	.02	343	320	15	--	--	593	6.9	22.0
	68-09-11	.01	318	290	7	4	.1	559	7.7	22.0
	70-04-02	.01	--	--	--	--	--	571	--	22.0
AY-68-29-503	71-04-07	--	--	--	--	--	--	--	--	22.0
	68-09-11	.01	286	270	8	3	.1	531	7.6	24.0
	69-09-15	--	--	--	--	--	--	--	--	--
	70-04-02	.01	--	--	--	--	--	534	--	22.0
	70-05-28	--	--	--	--	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- I- FIELD	DATE OF SAMPLE	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCUCCI (COL. PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AY-68-29-104	72-09-26	--	190	0	0	--	--
	72-09-26	--	700	1	0	--	--
	72-09-26	--	72	2	0	--	--
	72-09-26	--	100	5	0	--	--
	72-09-26	--	92	0	0	--	--
	72-09-26	--	84	0	0	--	--
	72-12-13	--	68	0	0	--	--
	72-12-13	--	0	0	0	--	--
	73-05-07	--	440	17	16	--	--
	73-05-07	--	200	10	14	--	.0
AY-68-29-105	69-11-12	--	50	0	0	--	--
	72-04-12	--	0	0	0	--	--
	72-04-12	--	0	0	0	--	--
	72-05-09	--	0	0	0	--	--
	72-05-09	--	0	0	0	--	--
AY-68-29-106	69-12-03	.1	0	0	0	--	--
	71-08-10	--	0	0	0	--	.0
	71-08-10	--	0	0	0	--	.0
	72-12-13	--	36	0	0	--	--
AY-68-29-108	72-12-13	--	0	0	0	--	.0
AY-68-29-109	73-05-07	--	30	1	0	--	.0
	70-05-07	--	--	0	0	--	--
	73-05-07	--	1	--	--	--	.0
	73-06-05	--	15	0	0	--	.0
	73-09-13	--	0	0	0	--	.0
AY-68-29-110	75-01-21	--	0	0	0	4.4	--
	73-12-06	--	0	0	0	--	--
	68-09-11	1.1	680	--	--	--	.0
	71-08-11	--	69	0	0	--	.0
AY-68-29-203	71-08-11	--	11	0	0	--	.0
AY-68-29-204	68-09-11	1.1	2	--	--	--	.0
	71-08-11	--	1	0	0	--	.0
	74-08-13	--	8	0	0	3.3	--
AY-68-29-206	70-04-02	.0	7	0	0	--	--
	71-08-03	--	43	2	0	--	--
AY-68-29-302	71-08-03	--	170	8	2	--	.0
	69-12-03	.2	0	0	0	--	--
	71-08-03	--	33	0	1	--	--
	71-08-03	--	42	0	0	--	--
	73-05-09	--	6	0	0	--	.0
AY-68-29-303	72-08-23	--	0	0	6	--	.0
	72-12-13	--	0	0	0	--	--
	73-05-08	--	620	0	0	--	.0
	73-09-13	--	0	0	1	--	.0
	74-10-01	--	60	0	0	.0	--
AY-68-29-401	68-09-11	1.0	0	--	--	--	.0
AY-68-29-403	75-01-21	--	0	0	0	2.6	--
	68-09-11	1.1	2	--	--	--	.0
	69-09-15	--	67	0	1	--	--
	70-04-02	.0	740	0	0	--	--
	71-02-03	.2	120	0	0	--	.0
	71-04-07	--	18	0	0	--	--
	71-04-07	--	--	--	--	--	--
	71-10-14	--	--	--	--	--	--
	72-04-13	--	32	0	0	--	--
	72-04-13	--	44	0	59	--	.0
	74-07-17	--	86	0	0	--	--
AY-68-29-405	74-07-17	--	12	0	0	--	--
	68-09-11	1.5	0	--	--	--	.0
	74-08-13	--	--	--	--	.9	--
AY-68-29-407	68-09-11	1.1	420	--	--	--	.0
AY-68-29-408	68-09-11	1.3	4	--	--	--	.0
AY-68-29-409	69-04-02	.3	71	--	--	--	.1
	71-08-12	--	35	1	0	--	--
	71-08-12	--	26	0	0	--	.0
AY-68-29-410	71-02-03	.8	0	0	0	--	.0
	71-08-10	--	0	0	0	--	.0
	72-12-13	--	0	0	0	--	--
	73-05-07	--	0	0	0	--	.0
	69-01-11	.3	32	--	--	--	--
	68-09-11	1.1	0	--	--	--	.0
	70-04-02	.0	0	0	0	--	--
AY-68-29-501	71-04-07	--	0	0	0	--	--
	68-09-11	1.5	460	--	--	--	.0
	69-09-15	--	1500	0	3	--	--
	70-04-02	.0	410	0	4	--	--
AY-68-29-503	70-05-28	--	1800	0	0	--	--

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

BEXAR COUNTY--CONTINUED										
LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPH) (00059)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
AY-68-29-503	70-05-28	1310	40	349	10	--	--	--	--	--
	70-05-28	1340	70	349	10	--	--	--	--	--
	70-05-28	1430	120	349	10	--	--	--	--	--
	70-05-28	1530	180	349	10	--	--	--	--	--
	70-05-28	1600	210	349	10	--	95	11	--	--
	71-02-03	1300	10	349	10	--	98	12	--	--
	71-03-04	1335	15	349	10	--	--	--	--	--
	71-04-07	--	15	349	10	--	--	--	--	--
	71-06-17	1042	10	349	10	--	--	--	--	--
	71-06-17	1112	40	349	10	13	--	11	--	--
	71-06-17	1142	70	349	10	--	--	--	--	--
	71-06-17	1232	120	349	10	--	--	--	--	--
	71-06-17	1432	240	349	10	--	--	--	--	--
	71-06-17	1832	480	349	10	13	--	--	--	--
	71-06-17	2232	720	349	10	--	--	--	--	--
	71-06-18	0232	960	349	10	12	--	--	--	--
	71-06-18	0632	1200	349	10	--	--	--	--	--
	71-06-18	1032	1440	349	10	--	--	--	--	--
	71-06-18	1432	1680	349	10	--	--	--	--	--
	71-06-18	1832	1920	349	10	--	--	--	--	--
	71-06-18	2232	2160	349	10	--	--	--	--	--
	71-06-19	0232	2400	349	10	--	--	--	--	--
	71-06-19	0632	2640	349	10	--	--	--	--	--
	71-06-19	1032	2880	349	10	13	--	11	--	--
	71-06-20	1020	10	349	10	--	--	--	--	--
	71-06-20	1050	40	349	10	--	--	--	--	--
	71-06-20	1120	70	349	10	--	--	--	--	--
	71-06-20	1220	120	349	10	--	--	--	--	--
	71-10-14	0945	30	349	10	--	--	--	--	--
	72-04-13	1000	10	349	10	--	--	--	--	--
	72-04-13	1050	60	349	10	--	97	11	--	--
	72-05-11	1400	30	349	10	--	--	--	--	--
	73-06-05	1130	15	349	10	--	98	12	4.4	--
	74-07-17	1415	10	349	10	--	--	--	--	--
	74-07-17	1505	60	349	10	13	96	11	4.6	--
AY-68-29-505	66-04-09	--	5	807	400	--	--	--	--	--
AY-68-29-702	69-11-03	--	many hrs	872	1500	12	87	14	7.1	--
	71-02-18	--	many hrs	872	1500	12	90	14	--	9.2
	72-01-26	--	several hrs	872	1500	--	--	--	--	--
	73-04-26	--	many hrs	--	--	--	94	14	--	--
	73-12-05	0917	several hrs	872	--	11	93	14	7.3	--
AY-68-29-815	71-04-29	--	several days	800	2700	--	80	17	--	--
	74-07-16	1415	15	800	2700	12	83	16	8.9	--
AY-68-29-809	68-10-31	--	10	364	5.0	9.3	74	15	--	13
	69-04-02	--	120	364	4.0	13	77	15	--	9.7
AY-68-29-810	69-04-02	--	20	500	8.0	12	86	15	--	6.9
	74-08-13	1105	30	500	8.0	12	92	15	8.0	--
AY-68-30-102	71-04-29	--	many hrs	418	1000	--	92	8.0	--	--
	72-04-06	1500	many hrs	418	1000	--	--	--	--	--
	73-12-04	1500	many hrs	418	--	12	88	6.5	6.6	--
AY-68-30-103	71-04-29	--	30	841	500	12	92	14	--	--
AY-68-30-108	73-12-06	1110	10	1970	20	--	--	--	--	--
	73-12-06	1130	30	1970	20	13	96	6.0	6.9	--
AY-68-35-306	71-04-07	--	many hrs	335	2000	12	75	17	--	--
AY-68-36-102	71-02-18	--	many hrs	786	1000	12	85	16	--	8.3
	73-04-26	--	many hrs	786	--	--	86	16	--	--
	73-12-05	1023	several hrs	786	--	12	84	16	8.5	--
AY-68-36-104	72-01-26	--	several hrs	808	1500	--	--	--	--	--
AY-68-36-106	69-11-12	--	10	400	10	28	122	6.7	41	--
AY-68-36-410	69-01-11	--	30	604	40	13	68	15	--	9.2
AY-68-36-502	71-02-18	--	many hrs	1224	2000	13	67	15	--	7.2
AY-68-37-101	71-06-03	--	many hrs	1005	5000	--	--	--	7.2	--
	72-01-26	1110	several hrs	1005	3000	--	--	--	--	--
	73-12-05	0947	several hrs	1005	--	12	78	18	8.0	--
AY-68-37-104	68-05-15	--	--	995	3000	--	--	--	--	--
	69-11-03	--	many hrs	995	3000	12	73	17	6.9	--
AY-68-37-404	71-02-18	--	many hrs	1326	5000	12	67	15	--	7.6
	73-12-05	1010	several hrs	1326	--	12	66	16	7.7	--
AY-68-37-706	74-10-07	0755	--	1521	--	--	65	17	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (000935)	BICAR- BONATE (MG/L) (000440)	CAR- BONATE (MG/L) (000445)	DIS- SOLVED SULFATE (MG/L) (000945)	DIS- SOLVED CHLO- RIDE (MG/L) (000940)	DIS- SOLVED FLUO- RIDE (MG/L) (000950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (000630)	AMMONIA NITRO- GEN (N) (MG/L) (000610)
AY-68-29-503	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	--	--	--	--	--	--	--	.90	.00
	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	--	336	0	4.4	6.8	--	--	.90	.00
	71-02-03	--	340	0	4.8	7.4	--	--	1.0	.00
	71-03-04	--	--	--	--	--	--	--	--	--
	71-04-07	--	--	--	--	--	--	--	--	--
	71-06-17	--	--	--	--	--	--	--	.90	.00
	71-06-17	--	--	--	4.4	9.0	.1	--	.90	.00
	71-06-17	--	--	--	--	--	--	--	1.0	.00
	71-06-17	--	--	--	4.4	7.8	--	--	.90	.00
	71-06-17	--	--	--	--	--	--	--	.90	.00
	71-06-17	--	--	--	5.0	7.6	.1	--	1.0	.00
	71-06-17	--	--	--	--	--	--	--	.90	.00
	71-06-18	--	--	--	4.8	7.0	.1	--	.90	.00
	71-06-18	--	--	--	--	--	--	--	.40	.00
	71-06-18	--	--	--	4.0	7.2	--	--	.90	.00
	71-06-18	--	--	--	--	--	--	--	.70	.00
	71-06-18	--	--	--	4.4	7.2	--	--	.90	.00
	71-06-18	--	--	--	--	--	--	--	.90	.00
	71-06-19	--	--	--	4.4	7.0	--	--	.90	.00
	71-06-19	--	--	--	--	--	--	--	.90	.00
	71-06-19	--	--	--	4.8	7.6	.1	--	.90	.00
	71-06-20	--	--	--	--	--	--	--	.90	.00
	71-06-20	--	--	--	--	--	--	--	.90	.00
	71-06-20	--	--	--	4.6	7.6	--	--	.90	.00
	71-10-14	--	--	--	--	--	--	--	--	--
	72-04-13	--	--	--	--	--	--	--	--	--
	72-04-13	--	338	0	4.4	7.4	--	--	.90	.00
	72-05-11	--	--	--	--	--	--	--	--	--
	73-06-05	.7	338	0	5.6	6.8	.2	--	.82	.00
	74-07-17	--	--	--	--	--	--	--	.87	.02
	74-07-17	1.0	340	0	6.1	7.6	--	--	1.0	.05
AY-68-29-505	68-04-09	--	--	--	--	--	--	--	--	--
AY-68-29-702	69-11-03	1.1	300	0	22	12	.2	--	1.4	--
	71-02-18	--	304	0	24	13	.2	--	1.6	.00
	72-01-26	--	--	--	--	--	--	--	--	--
	73-04-26	--	310	0	25	12	--	--	1.6	.00
	73-12-05	1.2	316	0	20	12	.2	--	1.1	.00
AY-68-29-805	71-04-29	--	274	0	30	12	--	--	1.6	.00
	74-07-16	1.5	286	0	36	14	--	--	1.7	.05
AY-68-29-809	68-10-31	--	284	0	15	18	.3	.04	.00	.00
	69-04-02	--	276	0	23	16	.2	--	.44	--
AY-68-29-810	69-04-02	--	300	0	23	11	.2	--	1.4	--
	74-08-13	1.2	312	0	21	12	--	--	1.2	.05
AY-68-30-102	71-04-29	--	272	0	32	10	--	--	1.2	.00
	72-04-06	--	--	--	--	11	--	--	--	--
	73-12-04	1.0	254	0	31	12	.2	--	.80	.00
AY-68-30-103	71-04-29	--	316	0	16	10	.2	--	1.1	.00
AY-68-30-108	73-12-06	--	--	--	--	--	--	--	--	--
	73-12-06	.9	296	0	17	11	.1	--	1.2	.00
AY-68-35-306	71-04-07	--	254	0	37	11	.2	--	2.3	.00
AY-68-36-102	71-02-18	--	284	0	31	14	.2	--	2.1	.00
	73-04-26	--	282	0	32	14	--	--	2.4	.00
	73-12-05	1.5	288	0	28	15	.2	--	2.4	.00
AY-68-36-104	72-01-26	--	--	--	--	--	--	--	--	--
AY-68-36-106	69-11-12	1.8	398	0	21	53	.4	--	.02	--
AY-68-36-410	69-01-11	--	252	0	23	11	.1	.01	1.3	.00
AY-68-36-502	71-02-18	--	250	0	17	12	--	--	1.3	.00
AY-68-37-101	71-06-03	1.4	258	0	33	14	--	--	1.6	.00
	72-01-26	--	--	--	--	--	--	--	--	--
	73-12-05	1.4	274	0	33	14	.2	--	--	.00
AY-68-37-104	68-05-15	--	--	--	--	--	--	--	--	--
	69-11-03	1.3	260	0	32	12	.2	--	1.2	--
AY-68-37-404	71-02-18	--	250	0	16	13	.1	--	1.5	.00
	73-12-05	1.2	248	0	16	14	.2	--	1.6	.00
AY-68-37-706	74-10-07	--	244	0	46	23	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (73301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
AY-68-29-503	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	.00	--	--	--	--	--	--	--	--
	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	--	--	--	--	--	--	--	--	--
	70-05-28	.00	--	280	7	--	--	533	7.0	--
	71-02-03	.00	--	290	15	--	--	537	7.4	21.5
	71-03-04	--	--	--	--	--	--	--	--	--
	71-04-07	--	--	--	--	--	--	--	--	--
	71-06-17	.00	--	--	--	--	--	--	--	23.0
	71-06-17	.00	--	--	--	--	--	--	7.7	23.0
	71-06-17	.00	--	--	--	--	--	--	--	23.0
	71-06-17	.00	--	--	--	--	--	--	7.6	--
	71-06-17	.00	--	--	--	--	--	--	--	--
	71-06-17	.00	--	--	--	--	--	--	7.7	--
	71-06-17	.00	--	--	--	--	--	--	--	--
	71-06-18	.00	--	--	--	--	--	--	7.7	--
	71-06-18	.00	--	--	--	--	--	--	--	--
	71-06-18	.00	--	--	--	--	--	--	7.7	--
	71-06-18	.00	--	--	--	--	--	--	--	--
	71-06-18	.00	--	--	--	--	--	--	7.7	--
	71-06-18	.00	--	--	--	--	--	--	--	--
	71-06-19	.00	--	--	--	--	--	--	7.6	--
	71-06-19	.00	--	--	--	--	--	--	--	--
	71-06-19	.00	--	--	--	--	--	--	7.6	--
	71-06-20	.00	--	--	--	--	--	--	--	--
	71-06-20	.00	--	--	--	--	--	--	--	--
	71-06-20	.00	--	--	--	--	--	--	7.5	--
	71-10-14	--	--	--	--	--	--	--	--	22.0
	72-04-13	--	--	--	--	--	--	545	--	23.0
	72-04-13	.00	--	290	10	--	--	543	7.3	23.0
	72-05-11	--	--	--	--	--	--	--	--	--
	73-06-05	.01	--	290	17	.3	.1	544	6.9	23.0
	74-07-17	.03	--	--	--	--	--	555	--	23.0
	74-07-17	.08	307	290	6	.3	.1	550	7.4	23.0
AY-68-29-505	68-04-09	--	--	--	--	--	--	--	--	--
AY-68-29-702	69-11-03	--	303	280	29	.5	.2	530	7.9	21.0
	71-02-18	.01	320	280	30	--	--	546	7.4	--
	72-01-26	--	--	--	--	--	--	538	--	--
	73-04-26	.00	--	290	38	--	--	551	7.1	22.0
AY-68-29-805	73-12-05	.00	314	290	31	.5	.2	529	6.9	22.0
	71-04-29	.01	--	270	45	--	--	519	7.5	--
	74-07-16	.00	313	270	39	.7	.2	548	7.5	23.5
AY-68-29-809	68-10-31	.01	285	250	14	--	--	517	7.0	--
	69-04-02	.01	292	250	28	--	--	511	7.4	23.0
AY-68-29-R10	69-04-02	.01	308	280	30	--	--	529	7.3	23.0
	74-08-13	.03	316	290	36	.6	.2	548	7.4	24.0
AY-68-30-102	71-04-29	.02	--	260	40	--	--	506	7.4	22.0
	72-04-06	--	--	--	--	--	--	516	--	--
	73-12-04	--	282	250	38	.5	.2	--	6.9	22.4
AY-68-30-103	71-04-29	.00	--	290	28	--	--	543	7.5	--
AY-68-30-108	73-12-06	--	--	--	--	--	--	495	--	23.0
	73-12-06	--	297	260	22	.5	.2	495	6.9	23.0
AY-68-35-306	71-04-07	.01	--	260	49	--	--	495	7.7	23.0
AY-68-36-102	71-02-18	.01	318	280	42	--	--	542	7.4	--
	73-04-26	.00	--	280	49	--	--	--	--	--
	73-12-05	--	307	280	39	.6	.2	525	7.1	22.0
	72-01-26	--	--	--	--	--	--	541	--	--
AY-68-36-104	69-11-12	.01	470	330	6	21	1.0	779	7.2	--
AY-68-36-410	69-01-11	.01	269	230	25	--	--	466	7.4	24.0
AY-68-36-502	71-02-18	.00	260	230	24	--	--	453	7.5	--
AY-68-37-101	71-06-03	.01	--	--	--	0	--	501	7.7	--
	72-01-26	--	--	--	--	--	--	515	--	--
	73-12-05	--	306	270	44	.6	.2	489	6.9	22.6
AY-68-37-104	68-05-15	--	--	--	--	--	--	--	--	--
AY-68-37-404	69-11-03	--	282	250	39	.6	.2	497	7.7	23.0
	71-02-18	.00	260	230	24	--	--	455	7.5	--
	73-12-05	--	255	230	27	.7	.2	450	7.1	22.5
AY-68-37-706	74-10-07	--	--	230	32	--	--	515	7.5	28.0

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	HIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (07310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCUCCI (COL- ONIES PER 100 ML) (31679)	OIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AY-68-29-503	70-05-28	--	410	--	--	--	--
	70-05-28	--	--	--	--	--	--
	70-05-28	--	250	0	0	--	--
	70-05-28	--	100	0	0	--	--
	70-05-28	--	--	--	--	--	--
	71-02-03	.3	57	0	0	--	--
	71-03-04	--	14000	0	0	--	--
	71-04-07	--	89	0	0	--	--
	71-06-17	--	29	0	0	--	.0
	71-06-17	--	18	0	0	--	.0
	71-06-17	--	24	0	0	--	.0
	71-06-17	--	24	0	0	--	.0
	71-06-17	--	13	0	--	--	.0
	71-06-17	--	22	0	0	--	.0
	71-06-17	--	6	0	0	--	.0
	71-06-18	--	7	0	0	--	.0
	71-06-18	--	2	0	0	--	.0
	71-06-18	--	20	0	0	--	.0
	71-06-18	--	4	0	0	--	.0
	71-06-18	--	3	0	3	--	.0
	71-06-18	--	9	0	2	--	.0
	71-06-19	--	7	0	0	--	.0
	71-06-19	--	4	0	0	--	.0
	71-06-19	--	3	0	0	--	.0
	71-06-20	--	720	0	0	--	.0
	71-06-20	--	47	0	1	--	.0
	71-06-20	--	68	0	1	--	.0
	71-06-20	--	32	0	0	--	.0
	71-10-14	--	--	--	--	--	--
	72-04-13	--	180	0	0	--	--
	72-04-13	--	70	0	0	--	.0
	72-05-11	--	--	--	--	--	--
	73-06-05	--	20	0	--	--	.0
	74-07-17	--	120	0	0	--	--
	74-07-17	--	92	0	0	3.3	--
AY-68-29-505	68-04-09	--	--	--	--	--	--
AY-68-29-702	69-11-03	--	--	--	--	--	--
	71-02-18	.6	0	0	0	--	.0
	72-01-26	--	0	0	0	--	--
	73-04-26	--	0	0	0	--	.0
	73-12-05	--	0	0	0	--	--
AY-68-29-805	71-04-29	--	0	0	0	--	.02
	74-07-16	--	0	0	0	--	--
AY-68-29-809	68-10-31	3.0	0	--	--	--	.0
	69-04-02	.6	--	--	--	--	.2
AY-68-29-810	69-04-02	.3	0	--	--	--	.0
	74-08-13	--	9	0	2	--	--
AY-68-30-102	71-04-29	--	0	0	0	--	.0
	72-04-06	--	2	0	0	--	--
	73-12-04	--	0	0	0	--	--
AY-68-30-103	71-04-29	--	0	0	0	--	.0
AY-68-30-108	73-12-06	--	0	0	0	--	--
	73-12-06	--	0	0	0	--	--
AY-68-35-306	71-04-07	.6	27	0	0	--	.0
AY-68-36-102	71-02-18	.6	0	0	0	--	.0
	73-04-26	--	1	0	2	--	.0
	73-12-05	--	0	0	0	--	--
AY-68-36-104	72-01-26	--	1	0	0	--	--
AY-68-36-106	69-11-12	.2	10	0	0	--	--
AY-68-36-410	69-01-11	.1	12	--	--	--	--
AY-68-36-502	71-02-18	--	0	0	0	--	.0
AY-68-37-101	71-06-03	--	0	0	0	--	.0
	72-01-26	--	0	0	0	--	--
	73-12-05	--	0	0	0	--	--
AY-68-37-104	68-05-15	--	--	--	--	--	--
	69-11-03	--	--	--	--	--	--
AY-68-37-404	71-07-18	.6	0	0	0	--	.0
	73-12-05	--	0	0	0	--	--
AY-68-37-706	74-10-07	--	--	--	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
AY-68-27-302	72-04-05	1205	365	10	60	--	0	--	--	--
	74-10-09	1430	517	10	60	10	0	--	0	0
AY-68-27-401	72-04-12	1120	--	5	60	--	0	--	--	--
AY-68-27-503	69-07-18	--	435	100	--	0	--	50	--	--
	71-08-05	--	435	100	--	--	0	--	--	--
	74-09-18	1200	435	225	120	10	0	--	0	0
AY-68-27-504	69-07-18	--	508	400	10	100	--	60	--	--
	71-03-03	--	508	500	150	--	0	--	--	--
	72-01-27	1005	508	525	40	--	--	--	--	--
	72-01-27	1155	508	525	150	--	0	--	--	--
	72-04-04	--	518	375	--	--	--	--	--	--
	72-08-24	1150	508	435	40	--	--	960	--	--
	74-09-18	1225	508	525	60	20	0	--	0	0
AY-68-27-506	69-07-18	--	400	7.0	10	0	--	50	--	--
AY-68-27-507	69-07-18	--	385	10	30	0	--	30	--	--
	71-06-03	0945	385	9.0	40	0	--	40	--	--
	71-06-03	1135	385	9.0	150	10	--	150	--	--
	71-06-03	1235	385	9.2	210	0	--	30	--	--
	72-05-10	1035	385	9.0	60	--	--	50	--	--
	73-04-25	1034	385	9.0	60	--	0	--	--	--
	74-09-18	1115	385	9.0	30	10	2	--	1	0
AY-68-27-508	71-08-05	--	320	10	60	--	0	--	--	--
	74-09-18	1430	343	10	60	10	0	--	0	0
AY-68-27-509	71-02-17	0950	343	8.0	40	--	0	--	--	--
	71-03-03	1545	343	8.0	390	--	0	--	--	--
	71-03-03	1945	343	8.0	630	--	0	--	--	--
AY-68-27-510	71-03-03	--	390	12	15	--	0	--	--	--
AY-68-27-511	71-08-05	1300	365	7.0	60	--	0	--	--	--
AY-68-27-602	71-08-04	1100	389	15	60	--	0	--	--	--
AY-68-27-603	71-08-04	1810	360	20	60	--	0	--	--	--
	71-08-11	1350	360	20	60	--	--	--	--	--
AY-68-27-605	72-05-10	1215	305	30	60	--	--	120	--	--
AY-68-27-606	72-08-24	1230	603	150	--	--	--	380	--	--
	73-02-15	--	603	1750	5	--	--	50	--	--
	73-04-26	--	603	--	10	--	0	--	--	--
	74-10-09	--	603	--	--	0	0	--	0	0
	74-10-09	1100	603	1850	5	0	0	--	0	0
AY-68-28-103	71-04-06	1605	401	5.0	60	--	0	--	--	--
AY-68-28-201	69-09-19	--	387	8.0	10	--	--	--	--	--
	71-02-17	0940	387	8.0	40	--	0	--	--	--
AY-68-28-202	74-09-17	1300	457	125	10	20	1	--	1	0
AY-68-28-203	72-08-22	1000	435	350	60	--	--	650	--	--
	74-09-17	1138	435	350	10	20	0	--	0	0
AY-68-28-205	72-08-22	1725	485	285	60	--	--	100	--	--
AY-68-28-401	71-04-06	--	500	1000	60	--	0	--	--	--
AY-68-28-402	71-04-06	0900	320	15	60	--	0	--	--	--
AY-68-28-502	68-09-11	--	506	100	--	100	--	40	--	--
	72-08-22	1900	506	110	660	--	--	550	--	--
	74-09-17	1355	506	110	10	10	0	--	0	0
AY-68-28-505	71-08-04	1100	456	10	60	--	0	--	--	--
	74-10-09	1250	456	10	10	10	0	--	--	0
AY-68-28-506	70-04-02	--	490	20	10	--	--	--	--	--
	71-02-03	--	490	20	10	--	0	--	--	--
AY-68-28-508	73-05-08	1345	396	300	--	--	--	--	--	--
AY-68-28-509	73-05-08	1300	400	75	--	--	--	--	--	--
	75-01-21	1150	400	75	240	10	1	--	1	0
AY-68-28-510	73-05-08	1545	400	200	1440	--	--	--	--	--
AY-68-28-702	71-08-04	--	450	1000	--	--	0	--	--	--
AY-68-28-903	68-10-30	--	762	3500	10	--	--	80	--	--
	71-04-06	1400	762	3500	--	--	0	--	--	--
	73-12-04	1130	762	--	--	--	0	--	--	--
AY-68-29-102	71-02-03	1130	525	80	--	--	0	--	--	--
AY-68-29-104	71-08-04	--	602	140	--	--	0	--	--	--
	73-05-07	1515	602	400	60	--	--	--	--	--
AY-68-29-105	69-11-12	--	285	10	10	--	--	30	--	--
AY-68-29-106	71-08-10	1500	490	20	60	--	0	--	--	--
AY-68-29-108	73-05-07	1305	366	130	15	--	--	--	--	--
AY-68-29-109	70-05-07	1700	--	--	--	--	--	--	--	--
AY-68-29-203	68-09-11	--	239	10	--	100	--	30	--	--
	71-08-11	1600	239	10	60	--	0	--	--	--
AY-68-29-204	68-09-11	--	280	7.0	--	0	--	30	--	--
	74-08-13	1335	280	7.0	30	40	1	--	<1	0
AY-68-29-206	70-04-02	--	390	10	20	--	--	--	--	--
	71-08-03	0900	390	10	60	--	0	--	--	--
AY-68-29-302	71-08-03	--	385	10	60	--	0	--	--	--
	73-05-09	1130	385	10	60	--	--	--	--	--
AY-68-29-303	72-08-23	1130	527	150	240	--	--	600	--	--
	73-05-08	--	527	150	--	--	--	--	--	--
	74-10-01	1315	527	150	240	--	0	--	0	0
AY-68-29-401	68-09-11	--	517	640	--	0	--	20	--	--
	75-01-21	1000	517	600	10	20	0	--	1	0

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED COBALT (CO) (UG/L) (01035)	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-68-27-302	72-04-05	--	4	--	0	--	<.2	--	--	620
	74-10-09	0	3	10	1	0	.0	2	330	420
AY-78-27-401	72-04-12	--	12	--	2	--	.3	--	--	3500
AY-68-27-503	69-07-18	--	0	0	--	0	--	--	--	30
	71-08-05	--	7	--	0	--	<.5	--	--	0
	74-09-18	0	3	10	2	0	.0	0	360	10
AY-68-27-504	69-07-18	--	10	0	--	0	--	--	--	40
	71-03-03	--	4	--	0	--	<.5	--	--	10
	72-01-27	--	3	0	0	--	<.2	--	--	60
	72-01-27	--	3	0	<0	--	<.2	--	--	--
	72-04-04	--	--	--	--	--	--	--	--	50
	72-08-24	--	--	--	--	--	--	--	--	--
	74-09-18	0	3	20	2	0	.0	0	260	0
AY-68-27-506	69-07-18	--	0	0	--	0	--	--	--	290
AY-68-27-507	69-07-18	--	10	0	--	0	--	--	--	240
	71-06-03	--	4	10	0	--	--	--	--	380
	71-06-03	--	7	0	0	--	--	--	--	310
	71-06-03	--	3	0	0	--	--	--	--	300
	72-05-10	--	--	0	--	--	--	--	330	--
	73-04-25	--	6	--	0	--	<.2	--	--	330
	74-09-18	0	11	20	2	10	.6	1	240	300
AY-68-27-508	71-08-05	--	2	--	0	--	<.5	--	--	460
	74-09-18	0	2	20	2	0	.1	0	420	260
AY-68-27-509	71-02-17	--	1	--	<0	--	<.0	--	--	40
	71-03-03	--	5	--	0	--	<.5	--	--	40
	71-03-03	--	3	--	0	--	<.5	--	--	30
AY-68-27-510	71-03-03	--	20	--	0	--	<.5	--	--	340
AY-68-27-511	71-08-05	--	11	--	0	--	<.5	--	--	230
AY-68-27-602	71-08-04	--	4	--	0	--	<.5	--	--	320
AY-68-27-603	71-08-04	--	3	--	0	--	<.5	--	--	110
	71-08-11	--	--	--	--	--	--	--	--	110
AY-68-27-605	72-05-10	--	--	0	--	--	--	--	300	--
AY-68-27-606	72-08-24	--	--	--	--	--	--	--	--	--
	73-02-15	--	--	--	--	--	--	--	--	--
	73-04-26	--	2	--	3	--	<.2	--	--	30
	74-10-09	0	1	20	0	0	.0	2	770	0
	74-10-09	0	1	20	--	--	--	2	770	--
AY-68-28-103	71-04-06	--	5	--	0	--	<.5	--	--	290
AY-68-28-201	69-09-19	--	--	--	--	0	--	--	--	--
	71-02-17	--	3	--	2	--	.5	--	--	60
AY-68-28-202	74-09-17	0	12	10	1	0	.0	0	230	10
AY-68-28-203	72-08-22	--	--	--	--	--	--	--	--	--
	74-09-17	0	3	10	2	0	.2	0	220	50
AY-68-28-205	72-08-22	--	--	--	--	--	--	--	--	--
AY-68-28-401	71-04-06	--	--	--	0	--	--	--	--	70
AY-68-28-402	71-04-06	--	7	--	0	--	<.5	--	--	160
AY-68-28-502	68-09-11	--	30	0	--	0	--	0	500	30
	72-08-22	--	--	--	--	--	--	--	--	--
	74-09-17	0	5	20	2	0	.0	0	--	30
AY-68-28-505	71-08-04	--	2	--	0	--	<.5	--	--	80
	74-10-09	0	1	20	0	0	.0	2	150	110
AY-68-28-506	70-04-02	--	--	30	--	--	--	--	--	--
	71-02-03	--	13	--	0	--	<.5	--	--	960
AY-68-28-508	73-05-08	--	--	70	--	0	--	--	--	--
AY-68-28-509	73-05-08	--	--	0	--	0	--	--	--	--
	75-01-21	0	2	0	2	0	.1	1	290	7
AY-68-28-510	73-05-08	--	--	0	--	0	--	--	--	--
AY-68-28-702	71-08-04	--	0	--	0	--	.6	--	--	0
AY-68-28-903	68-10-30	--	--	--	--	--	--	--	--	--
	71-04-06	--	2	--	0	--	<.5	--	--	90
	73-12-04	--	5	--	0	--	<.2	--	--	210
AY-68-29-102	71-02-03	--	6	--	0	--	<.5	--	--	20
AY-68-29-104	71-08-04	--	4	--	0	--	<.5	--	--	0
	73-05-07	--	--	0	--	0	--	--	--	--
AY-68-29-105	69-11-12	--	20	0	10	0	--	--	--	820
AY-68-29-106	71-08-10	--	2	--	0	--	<.5	--	--	160
AY-68-29-108	73-05-07	--	--	0	--	0	--	--	--	--
AY-68-29-109	70-05-07	--	--	0	--	0	--	--	--	--
AY-68-29-203	68-09-11	--	20	0	0	0	--	0	170	140
	71-08-11	--	10	--	0	--	.9	--	--	70
AY-68-29-204	68-09-11	--	0	0	0	0	--	0	100	580
	74-08-13	0	3	10	2	0	.0	0	110	150
AY-68-29-206	70-04-02	--	--	20	--	--	--	--	--	--
	71-08-03	--	2	--	0	--	<.5	--	--	200
AY-68-29-302	71-08-03	--	2	--	0	--	--	--	--	190
	73-05-09	--	--	0	--	0	--	--	--	--
AY-68-29-303	72-08-23	--	--	--	--	--	--	--	--	--
	73-05-08	--	--	10	--	0	--	--	--	--
	74-10-01	0	2	20	2	0	.0	0	210	0
AY-68-29-401	68-09-11	--	10	0	0	0	--	0	280	30
	75-01-21	1	9	0	4	10	.5	0	250	20

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
AY-68-29-403	68-09-11	--	340	10	--	0	--	0	--	--
	71-02-03	1400	340	10	10	--	0	--	--	--
	71-10-14	1150	--	--	30	--	--	--	--	--
	72-04-13	1240	340	10	10	--	0	--	--	--
	72-04-13	1330	340	10	60	--	0	--	--	--
AY-68-29-405	74-07-17	1345	340	10	60	0	1	--	<1	0
	68-09-11	--	395	100	--	0	--	30	--	--
	74-08-13	1145	395	100	180	0	0	--	1	0
AY-68-29-407	68-09-11	--	349	25	--	100	--	40	--	--
AY-68-29-408	68-09-11	--	390	15	--	0	--	40	--	--
AY-68-29-409	69-04-02	--	460	6.0	60	--	--	30	--	--
	71-08-12	1400	460	6.0	--	--	0	--	--	--
AY-68-29-410	71-02-03	1000	318	620	10	--	0	--	--	--
	73-05-07	1625	318	620	10	--	--	--	--	--
AY-68-29-501	69-01-11	--	350	10	10	0	--	220	--	--
AY-68-29-502	68-09-11	--	264	10	--	0	--	30	--	--
AY-68-29-503	68-09-11	--	349	10	10	0	--	20	--	--
	71-02-03	1300	349	10	10	--	0	--	--	--
	71-06-17	1112	349	10	40	--	0	--	--	--
	71-06-17	1232	349	10	120	--	0	--	--	--
	71-06-17	1832	349	10	480	--	0	--	--	--
AY-68-29-702	71-06-18	1032	349	10	1440	--	0	--	--	--
	71-06-19	1032	349	10	2880	--	0	--	--	--
	71-06-20	1220	349	10	120	--	0	--	--	--
	71-10-14	0945	349	10	30	--	--	--	--	--
	72-05-11	1400	349	10	30	--	--	--	--	--
AY-68-29-805	74-07-17	1505	349	10	60	0	1	--	1	0
	71-02-18	--	872	1500	--	--	0	--	--	--
	73-12-05	0917	872	--	--	--	1	--	--	--
AY-68-29-809	71-04-29	--	800	2700	--	--	--	--	--	--
AY-68-29-810	74-07-16	1415	800	2700	15	0	2	--	<1	0
	68-10-31	--	364	5.0	10	0	--	40	--	--
	69-04-02	--	364	4.0	120	--	--	50	--	--
AY-68-30-102	69-04-02	--	500	8.0	20	--	--	40	--	--
	74-08-13	1105	500	8.0	30	30	1	--	<1	0
AY-68-30-103	71-04-29	--	418	1000	--	--	--	--	--	--
AY-68-35-306	71-04-29	--	841	500	30	--	--	--	--	--
AY-68-36-102	71-04-07	--	335	2000	--	--	0	--	--	--
	71-02-18	--	786	1000	--	--	0	--	--	--
AY-68-36-106	73-12-05	1023	786	--	--	--	1	--	--	--
	69-11-12	--	400	10	10	--	0	--	--	--
AY-68-36-410	69-01-11	--	604	40	30	0	--	50	--	--
AY-68-36-502	71-02-18	--	1224	2000	--	--	0	--	--	--
AY-68-37-101	71-06-03	--	1005	5000	--	10	0	80	--	--
	73-12-05	0947	1005	--	--	--	1	--	--	--
AY-68-37-404	71-02-18	--	1326	5000	--	--	0	--	--	--
	73-12-05	1010	1326	--	--	--	1	--	--	--

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
AY-68-29-403	68-09-11	--	10	0	0	0	--	0	140	560
	71-02-03	--	2	--	0	--	<.5	--	--	420
	71-10-14	--	--	--	--	--	1.0	--	--	--
	72-04-13	--	2	--	0	--	<.2	--	--	300
	72-04-13	--	4	--	0	--	<.2	--	--	220
AY-68-29-405	74-07-17	0	3	20	2	0	.2	1	160	30
	68-09-11	--	10	0	0	0	--	0	210	70
	74-08-13	0	3	10	1	0	.0	0	200	40
AY-68-29-407	68-09-11	--	20	0	0	0	--	0	200	80
AY-68-29-408	68-09-11	--	0	0	0	0	--	0	120	230
AY-68-29-409	64-04-02	--	--	10	--	0	--	--	--	--
	71-08-12	--	5	--	0	--	<.5	--	--	230
AY-68-29-410	71-02-03	--	5	--	0	--	<.5	--	--	10
	73-05-07	--	--	0	--	0	--	--	--	--
AY-68-29-501	69-01-11	--	0	10	0	10	--	0	140	400
AY-68-29-502	68-09-11	--	10	30	0	0	--	0	140	680
	68-09-11	--	10	0	0	0	--	0	100	120
	71-02-03	--	40	--	0	--	<.5	--	--	100
	71-06-17	--	5	--	0	--	.7	--	--	30
	71-06-17	--	4	--	0	--	.7	--	--	30
	71-06-17	--	3	--	0	--	.5	--	--	40
	71-06-18	--	2	--	0	--	.8	--	--	50
	71-06-19	--	3	--	0	--	<.6	--	--	0
	71-06-20	--	3	--	0	--	<.9	--	--	10
	71-10-14	--	--	--	--	--	1.0	--	--	--
AY-68-29-702	72-05-11	--	--	--	--	--	<.2	--	--	--
	74-07-17	0	18	20	3	0	.0	2	140	20
	71-02-18	--	1	--	0	--	<.5	--	--	10
	73-12-05	--	4	--	0	--	<.2	--	--	0
AY-68-29-805	71-04-29	--	4	--	0	--	--	--	--	0
AY-68-29-809	74-07-16	0	6	20	3	0	.0	2	520	10
	68-10-31	--	10	2900	0	80	--	10	430	60
	69-04-02	--	--	460	--	0	--	--	--	--
AY-68-29-810	69-04-02	--	--	0	--	0	--	--	--	--
	74-08-13	0	30	10	1	0	.3	0	390	670
AY-68-30-102	71-04-29	--	2	--	0	--	--	--	--	30
AY-68-30-103	71-04-29	--	5	--	0	--	--	--	--	70
AY-68-35-306	71-04-07	--	0	--	0	--	<.5	--	--	20
AY-68-36-102	71-02-18	--	5	--	6	--	<.5	--	--	20
	73-12-05	--	2	--	0	--	<.2	--	--	0
AY-68-36-106	69-11-12	--	0	--	0	--	<.5	--	--	0
AY-68-36-410	69-01-11	--	0	0	0	0	--	0	400	90
AY-68-36-502	71-02-18	--	6	--	0	--	<.5	--	--	0
AY-68-37-101	71-06-03	--	2	10	0	--	<.5	--	--	0
	73-12-05	--	2	--	0	--	<.2	--	--	0
AY-68-37-404	71-02-18	--	6	--	0	--	<.5	--	--	10
	73-12-05	--	6	--	0	--	<.2	--	--	20

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

BEXAR COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)
AY-68-28-506	71-02-03	--	490	20	10	.00	.00	.00	.00	.00
AY-68-28-509	75-01-21	1150	400	75	240	.00	.00	.00	.00	.00
AY-68-28-903	68-10-30	--	762	3500	10	.00	.00	.00	.00	.00
AY-68-29-102	71-02-03	1130	525	80	--	.00	.00	.00	.00	.00
AY-68-29-204	68-09-11	--	280	7.0	--	.00	.00	.00	.00	.00
AY-68-29-303	74-10-01	1315	527	150	240	.00	.00	.00	.00	.00
AY-68-29-401	75-01-21	1000	517	600	10	.00	.00	.00	.00	.00
AY-68-29-403	68-09-11	--	340	--	--	.00	.00	.00	.00	.00
	71-02-03	--	340	--	--	.00	.00	.00	.00	.00
AY-68-29-503	71-02-03	1300	349	10	10	.00	.00	.00	.00	.00
AY-68-29-505	68-04-09	--	807	400	5	.00	.00	.00	.00	.00
AY-68-36-410	69-01-11	--	604	40	30	.00	.00	.00	.00	.00
AY-68-37-104	68-05-15	--	995	3000	--	.00	.00	.00	.00	.00

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)
AY-68-28-506	71-02-03	.00	.00	.00	.00	.0	--	.00	.00	.00
AY-68-28-509	75-01-21	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-28-903	68-10-30	.00	.00	.00	.00	--	--	--	--	--
AY-68-29-102	71-02-03	.00	.00	.00	.00	.0	--	.00	.00	.00
AY-68-29-204	68-09-11	.00	.00	.00	.00	--	--	--	--	--
AY-68-29-303	74-10-01	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-401	75-01-21	.00	.00	.00	.00	.0	.0	.00	.00	.00
AY-68-29-403	68-09-11	.00	.00	.00	.00	--	--	--	--	--
	71-02-03	.00	.00	.00	.00	.0	--	.00	.00	.00
AY-68-29-503	71-02-03	.00	.00	.00	.00	.0	--	.00	.00	.00
AY-68-29-505	68-04-09	.00	.00	.00	.00	--	--	--	--	--
AY-68-36-410	69-01-11	.00	.00	.00	.00	--	--	--	--	--
AY-68-37-104	68-05-15	.00	.00	.00	.00	--	--	--	--	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AY-68-28-506	71-02-03	.00	.00	.00	.00
AY-68-28-509	75-01-21	.00	.00	.00	.00
AY-68-28-903	68-10-30	--	.00	.00	.00
AY-68-29-102	71-02-03	.00	.00	.00	.00
AY-68-29-204	68-09-11	--	.00	.00	.00
AY-68-29-303	74-10-01	.00	.00	.00	.00
AY-68-29-401	75-01-21	.00	.00	.00	.00
AY-68-29-403	68-09-11	--	.00	.00	.00
	71-02-03	.00	.00	.00	.00
AY-68-29-503	71-02-03	.00	.00	.00	.00
AY-68-29-505	68-04-09	--	.00	.00	.00
AY-68-36-410	69-01-11	--	.00	.00	.00
AY-68-37-104	68-05-15	--	.00	.00	.00

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

COMAL COUNTY										
LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN)	TOTAL DEPTH OF WELL (FT)	INSTAN- TANEOUS FLOW RATE (GPM)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L)
			(72004)	(72008)	(00059)	(00955)	(00915)	(00925)	(00930)	(00933)
Dx-68-15-901	68-10-31	--	--	--	11220	11	98	15	--	7.4
	74-12-16	--	--	--	--	10	97	13	7.4	--
Dx-68-16-502	68-11-21	--	10	230	300	12	88	16	7.6	--
Dx-68-16-802	69-01-11	--	10	190	10	12	82	16	--	12
Dx-68-22-301	70-05-19	--	10	375	15	12	101	7.6	.9	--
Dx-68-22-801	70-05-19	--	15	400	10	12	93	8.8	4.8	--
Dx-68-22-901	73-02-07	--	20	255	300	--	86	12	--	--
	74-07-16	--	15	255	300	--	--	--	--	--
	74-07-16	0900	--	255	--	11	85	12	5.3	--
Dx-68-22-902	73-02-07	1055	15	240	750	--	86	12	--	--
	74-07-16	--	10	240	750	11	86	12	5.6	--
	74-07-16	0945	--	240	--	--	--	--	--	--
Dx-68-23-201	69-01-11	--	10	367	10	12	91	7.6	--	11
Dx-68-23-203	73-02-07	--	10	400	50	--	90	7.3	--	--
Dx-68-23-213	73-06-07	--	60	340	10	--	84	15	6.8	--
	73-06-13	0810	10	340	10	--	--	--	--	--
	73-06-13	0900	60	340	10	--	84	15	6.7	--
	75-01-22	--	60	340	--	--	--	--	--	--
	75-01-22	1400	60	340	10	13	76	16	7.2	--
Dx-68-23-214	73-06-06	--	60	327	10	--	84	15	6.6	--
	73-06-14	--	60	327	10	--	84	15	6.5	--
	75-01-22	--	60	327	--	--	--	--	--	--
	75-01-22	1505	60	327	10	13	82	13	6.9	--
Dx-68-23-215	73-06-06	--	60	320	10	--	84	15	6.5	--
Dx-68-23-216	73-06-14	--	60	320	20	--	80	15	6.0	--
	75-01-22	1205	60	320	20	12	79	15	6.3	--
Dx-68-23-217	73-06-07	--	60	320	10	--	86	15	6.0	--
Dx-68-23-218	73-06-06	--	60	320	10	--	87	15	6.0	--
	73-06-14	--	60	320	10	--	87	15	6.0	--
Dx-68-23-219	73-06-06	--	60	320	10	--	98	12	5.6	--
	73-06-13	1340	10	320	10	--	--	--	--	--
	73-06-13	1420	60	320	10	--	68	4.7	2.5	--
Dx-68-23-301	68-03-13	--	--	1/	--	--	--	--	--	--
	68-04-01	--	--	2/	300	--	--	--	--	--
	69-03-07	--	--	3/	--	--	80	16	--	--
	69-08-19	--	--	4/	--	--	--	--	--	--
	70-03-03	--	--	5/	--	--	--	--	--	--
	70-08-14	--	--	6/	800	--	--	--	--	--
	71-02-17	--	--	7/	2000	13	79	16	--	8.7
	71-03-12	--	--	8/	6700	--	82	16	--	--
	71-07-20	--	--	9/	--	--	75	16	8.1	--
	71-08-12	--	--	10/	200	--	--	--	--	--
	72-03-27	--	--	11/	9000	--	--	--	--	--
	72-05-12	--	--	12/	4500	12	80	16	7.8	--
	73-02-06	--	--	13/	4500	13	78	16	--	8.7
	73-05-15	--	--	14/	--	12	80	16	7.6	--
	73-11-23	--	--	15/	--	12	79	17	8.1	--
	74-04-02	1010	--	16/	2200	12	77	16	8.4	--
	74-12-16	--	--	17/	--	12	77	16	8.5	--
Dx-68-23-303	73-02-06	--	--	--	--	--	--	17	--	--
	74-10-08	--	10	1045	4200	--	--	--	--	--
	74-10-08	1115	--	1045	--	13	79	15	9.6	--
Dx-68-23-304	73-02-07	--	30	1061	1.5	--	75	17	--	--
Dx-68-23-305	73-02-06	--	45	102	1200	--	76	17	--	--
	74-10-08	--	10	102	1200	--	--	--	--	--
	74-10-08	1045	--	102	--	13	76	15	9.8	--
Dx-68-23-311	73-08-09	--	60	140	10	13	110	12	6.0	--
	74-03-14	1520	10	140	15	--	--	--	--	--
	74-03-14	1610	60	140	15	--	100	12	6.2	--
Dx-68-23-312	73-08-09	--	30	--	10	13	100	13	5.6	--
Dx-68-23-313	74-04-03	--	60	150	10	12	97	13	5.4	--
	74-05-08	1015	60	150	10	--	98	13	--	--
Dx-68-23-314	74-04-03	1145	60	150	10	12	98	12	5.4	--
	74-05-08	1130	60	150	15	--	97	13	--	--
Dx-68-23-504	74-07-16	--	10	215	500	--	--	--	--	--
	74-07-16	1100	--	215	--	12	82	17	8.3	--
Dx-68-23-601	73-02-06	--	30	365	2100	--	78	16	--	--
	74-10-08	--	10	365	2100	--	--	--	--	--
	74-10-08	1135	--	365	--	12	77	15	8.6	--
Dx-68-23-602	74-10-08	--	420	790	2750	--	--	--	--	--
	74-10-08	1200	--	790	--	13	82	14	7.5	--
Dx-68-23-605	73-07-13	--	15	230	20	11	68	11	6.9	--
Dx-68-23-606	73-07-12	1630	60	238	15	10	64	9.8	6.8	--
Dx-68-23-607	73-07-11	1125	60	--	10	11	73	13	7.6	--
	74-11-05	--	10	.00	10	--	--	--	--	--
	74-11-05	1415	--	.00	--	11	64	15	7.7	--
Dx-68-23-608	73-07-12	1100	60	228	10	11	73	10	8.2	--
	74-11-05	1505	10	228	10	11	72	10	7.6	--
Dx-68-23-609	73-08-07	--	60	200	10	11	72	9.9	6.1	--
	74-11-05	--	60	200	10	--	--	10	--	--

See footnotes at end of table.

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	IODIDE (I) (MG/L) (71865)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
DX-68-15-901	68-10-31	--	340	0	15	14	.3	.01	2.1	.00
	74-12-16	1.5	342	0	14	11	.2	--	--	--
DX-68-16-502	68-11-21	.9	310	0	19	13	.1	--	1.6	--
DX-68-16-892	69-01-11	--	304	0	20	14	.1	.01	1.8	.00
DX-68-22-301	70-05-19	1.1	332	0	1.2	7.2	.0	--	.80	.00
DX-68-22-801	70-05-19	1.0	308	0	6.0	9.4	E.0	--	2.3	.00
DX-68-22-901	73-02-07	--	300	0	11	9.2	--	--	2.2	.00
	74-07-16	--	--	--	--	--	--	--	--	--
	74-07-16	1.1	299	0	9.2	9.5	--	--	1.8	.01
DX-68-22-902	73-02-07	--	310	0	7.2	8.4	--	--	1.9	.00
	74-07-16	1.0	287	0	13	9.9	--	--	--	--
	74-07-16	--	--	--	--	--	--	--	1.9	.01
DX-68-23-201	69-01-11	--	288	0	11	16	.1	.01	--	.00
DX-68-23-203	73-02-07	--	276	0	9.0	12	--	--	3.1	.00
DX-68-23-213	73-06-07	.7	294	0	16	10	.2	--	2.7	.00
	73-06-13	--	--	--	--	--	--	--	--	--
	73-06-13	.7	296	0	15	11	--	--	2.7	.00
	75-01-22	--	--	--	--	--	--	--	--	--
	75-01-22	1.3	292	0	18	13	.2	--	2.4	.00
DX-68-23-214	73-06-06	.8	304	0	14	9.9	--	--	2.4	.00
	73-06-14	.7	300	0	14	10	--	--	2.4	.00
	75-01-22	--	--	--	--	--	--	--	--	--
	75-01-22	.9	294	0	17	14	.2	--	2.3	.00
DX-68-23-215	73-06-06	.7	308	0	14	11	--	--	2.3	--
DX-68-23-216	73-06-14	.8	290	0	12	10	--	--	2.0	.00
	75-01-22	1.2	297	0	11	13	.1	--	2.0	.00
DX-68-23-217	73-06-07	.8	306	0	13	10	--	--	2.2	.00
DX-68-23-218	73-06-06	.7	306	0	14	11	--	--	2.0	.01
	73-06-14	.8	308	0	13	9.5	--	--	2.2	--
DX-68-23-219	73-06-06	1.0	336	0	11	8.0	--	--	1.6	--
	73-06-13	--	--	--	--	--	--	--	--	--
DX-68-23-301	73-06-13	1.8	220	0	5.0	3.7	--	--	1.1	--
	68-03-13	--	286	0	23	12	--	--	--	--
	68-04-01	--	--	--	--	--	--	--	--	--
	69-03-07	--	286	0	23	12	--	--	--	--
	69-08-19	--	284	0	22	12	--	--	--	--
	70-03-03	--	286	0	23	12	--	--	--	--
	70-08-14	--	258	0	23	13	--	--	--	--
	71-02-17	--	284	0	24	13	.2	--	1.6	.00
	71-03-12	--	284	0	23	13	--	--	--	--
	71-07-20	1.3	276	0	23	12	.3	--	1.2	--
	71-08-12	--	--	--	--	--	--	--	--	--
	72-03-27	--	286	0	24	15	--	--	--	--
	72-05-12	1.4	286	0	24	15	.3	--	--	--
	73-02-06	--	280	0	25	12	.2	--	1.8	.00
	73-05-15	1.2	283	0	25	14	.3	--	.76	--
	73-11-23	1.4	300	0	22	13	.2	--	1.9	--
	74-04-02	1.3	280	0	22	15	.2	--	1.6	.02
	74-12-16	1.6	283	0	23	14	.2	--	--	--
DX-68-23-303	73-02-06	--	280	0	32	13	--	--	1.8	.00
	74-10-08	--	--	--	--	--	--	--	--	--
DX-68-23-304	74-10-08	1.2	280	0	28	15	--	--	1.6	.04
DX-68-23-305	73-02-07	--	274	0	27	14	--	--	1.6	.00
	73-02-06	--	276	0	28	13	--	--	1.8	.00
	74-10-08	--	--	--	--	--	--	--	--	--
DX-68-23-311	74-10-08	1.1	277	0	26	15	--	--	1.6	.04
	73-08-09	1.0	356	0	8.8	13	.1	--	2.5	.00
	74-03-14	--	--	--	--	--	--	--	--	--
	74-03-14	.9	340	0	8.8	12	.1	--	2.2	.03
DX-68-23-312	73-08-09	1.1	356	0	10	10	.1	--	2.8	.00
DX-68-23-313	74-04-03	.9	336	0	9.2	11	.1	--	2.3	.01
	74-05-08	--	340	0	10	9.8	--	--	2.2	.04
DX-68-23-314	74-04-03	.9	336	0	9.2	11	.1	--	2.5	.06
	74-05-08	--	335	0	10	9.8	--	--	2.3	.04
DX-68-23-504	74-07-16	--	--	--	--	--	--	--	--	--
DX-68-23-601	74-07-16	1.3	292	0	27	14	--	--	1.6	.02
	73-02-06	--	282	0	25	13	--	--	1.8	.00
	74-10-08	--	--	--	--	--	--	--	--	--
DX-68-23-602	74-10-08	1.0	287	0	23	14	--	--	1.7	.04
	74-10-08	--	--	--	--	--	--	--	--	--
DX-68-23-605	74-10-08	1.1	300	0	20	12	--	--	1.7	.03
	73-07-13	.9	216	0	20	13	.2	--	2.8	.01
DX-68-23-606	73-07-12	.9	200	0	18	12	.2	--	3.4	.01
DX-68-23-607	73-07-11	1.0	244	0	22	12	.2	--	3.0	.00
	74-11-05	--	--	--	--	--	--	--	--	--
DX-68-23-608	74-11-05	1.0	240	0	17	12	--	--	3.2	.01
	73-07-12	.9	226	0	20	15	.2	--	3.5	.00
	74-11-05	1.2	232	0	15	12	--	--	3.2	.01
DX-68-23-609	73-08-07	1.0	224	0	16	13	.2	--	3.8	.00
	74-11-05	--	--	--	--	--	--	--	--	--

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
DX-68-15-901	68-10-31	.02	337	310	28	--	--	596	6.9	--
	74-12-16	--	330	300	16	5	.2	539	6.6	21.5
DX-68-16-502	68-11-21	--	309	290	31	5	.2	554	7.4	--
DX-68-16-802	69-01-11	.01	313	270	22	--	--	540	7.3	23.0
DX-68-22-301	70-05-19	.01	295	280	11	1	.0	540	6.9	22.0
DX-68-22-801	70-05-19	.00	287	270	16	4	.1	529	6.9	22.0
DX-68-22-901	73-02-07	.01	--	260	18	--	--	504	7.2	22.0
	74-07-16	--	--	--	--	--	--	--	--	--
	74-07-16	.00	281	260	17	4	.1	503	7.5	23.0
DX-68-22-902	73-02-07	.01	--	260	10	--	--	485	7.2	22.0
	74-07-16	--	280	260	29	4	.1	507	7.4	--
	74-07-16	.00	--	--	--	--	--	--	--	23.0
DX-68-23-201	69-01-11	.01	306	260	23	--	--	514	7.1	23.0
DX-68-23-203	73-02-07	.02	--	260	28	--	--	500	7.1	22.5
DX-68-23-213	73-06-07	.02	--	270	30	5	.2	527	7.2	23.0
	73-06-13	--	--	--	--	--	--	518	--	24.0
	73-06-13	.01	--	270	29	5	.2	519	7.1	24.0
	75-01-22	--	--	--	--	--	--	--	--	--
	75-01-22	.00	289	260	16	6	.2	517	7.3	23.0
DX-68-23-214	73-06-06	.01	--	270	22	5	.2	538	7.1	23.0
	73-06-14	.01	--	270	25	5	.2	524	7.0	23.0
	75-01-22	--	--	--	--	--	--	--	--	--
	75-01-22	.03	293	260	17	5	.2	522	7.2	23.0
DX-68-23-215	73-06-06	.01	--	270	19	5	.2	520	7.2	23.0
DX-68-23-216	73-06-14	.01	--	260	24	5	.2	512	7.1	24.0
	75-01-22	.04	284	260	16	5	.2	489	7.1	23.5
DX-68-23-217	73-06-07	.01	--	280	26	4	.2	543	7.1	23.0
DX-68-23-218	73-06-06	.01	--	280	28	4	.2	543	7.1	--
	73-06-14	.01	--	280	26	4	.2	549	6.8	24.0
DX-68-23-219	73-06-06	.02	--	290	19	4	.1	548	6.9	23.0
	73-06-13	--	--	--	--	--	--	372	--	22.5
	73-06-13	.07	--	190	9	3	.1	354	7.1	22.5
DX-68-23-301	68-03-13	--	--	--	--	--	--	510	7.2	24.0
	68-04-01	--	--	--	--	--	--	--	--	--
	69-03-07	--	--	270	31	--	--	517	7.2	23.0
	69-08-19	--	--	--	--	--	--	516	7.6	23.0
	70-03-03	--	--	--	--	--	--	522	7.1	23.5
	70-08-14	--	--	--	--	--	--	485	7.2	23.0
	71-02-17	.01	301	260	30	--	--	519	7.2	--
	71-03-12	--	--	270	38	--	--	521	7.5	23.0
	71-07-20	--	--	250	27	6	.2	481	7.4	--
	71-08-12	--	--	--	--	--	--	516	--	24.0
	72-03-27	--	--	--	--	--	--	522	7.4	23.0
	72-05-12	--	298	270	31	6	.2	522	7.6	--
	73-02-06	.00	299	260	31	--	--	515	7.1	23.4
	73-05-15	.00	296	270	34	6	.2	479	7.6	23.5
	73-11-23	.01	301	270	22	6	.2	528	7.1	24.0
	74-04-02	.02	290	260	28	7	.2	522	7.3	23.5
	74-12-16	--	300	260	27	7	.2	520	6.5	23.5
DX-68-23-303	73-02-06	.01	--	--	--	--	--	518	7.3	24.0
	74-10-08	--	--	--	--	--	--	--	--	--
	74-10-08	.00	300	260	30	7	.3	519	7.3	25.0
DX-68-23-304	73-02-07	.00	--	260	33	--	--	512	7.3	21.0
DX-68-23-305	73-02-06	.00	--	260	33	--	--	510	7.5	23.8
	74-10-08	--	--	--	--	--	--	--	--	--
	74-10-08	.00	293	250	25	8	.3	509	7.4	25.5
DX-68-23-311	73-08-09	.02	339	320	32	4	.1	632	6.9	22.6
	74-03-14	--	--	--	--	--	--	564	--	22.0
	74-03-14	.03	--	300	20	4	.2	580	7.1	--
DX-68-23-312	73-08-09	.01	328	300	11	4	.1	611	6.9	22.8
DX-68-23-313	74-04-03	.04	314	300	20	4	.1	566	6.9	22.5
	74-05-08	.01	--	300	19	--	--	555	7.0	23.0
DX-68-23-314	74-04-03	.02	314	290	19	4	.1	568	6.9	22.5
	74-05-08	.01	--	300	21	--	--	561	6.8	23.0
DX-68-23-504	74-07-16	--	--	--	--	--	--	--	--	--
	74-07-16	.00	306	280	36	6	.2	530	7.6	24.0
DX-68-23-601	73-02-06	.00	--	260	29	--	--	515	7.1	23.4
	74-10-08	--	--	--	--	--	--	--	--	--
	74-10-08	.00	293	250	19	7	.2	511	7.3	24.5
DX-68-23-602	74-10-08	--	--	--	--	--	--	--	--	--
	74-10-08	.00	298	260	17	6	.2	518	7.4	24.0
DX-68-23-605	73-07-13	.01	237	220	38	6	.2	444	7.0	23.0
DX-68-23-606	73-07-12	.01	220	200	36	7	.2	426	7.0	22.5
DX-68-23-607	73-07-11	.01	260	240	36	7	.2	470	--	23.2
	74-11-05	--	--	--	--	--	--	--	--	--
	74-11-05	.00	247	220	25	7	.2	453	7.2	23.0
DX-68-23-608	73-07-12	.01	250	220	38	7	.2	470	6.9	22.5
	74-11-05	.02	243	220	31	7	.2	437	7.3	21.0
DX-68-23-609	73-08-07	.01	240	220	37	6	.2	475	7.0	22.8
	74-11-05	--	--	--	--	--	--	--	--	--

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCUCCT (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
DX-68-15-901	68-10-31	.2	24	--	--	--	.0
	74-12-16	--	--	--	--	--	--
DX-68-16-502	68-11-21	--	--	--	--	--	--
DX-68-16-802	69-01-11	.1	0	--	--	--	--
DX-68-22-301	70-05-19	.1	220	1	0	--	--
DX-68-22-801	70-05-19	.2	5	0	0	--	--
DX-68-22-901	73-02-07	--	0	0	0	--	.0
	74-07-16	--	0	0	0	--	--
	74-07-16	--	--	--	--	--	--
DX-68-22-902	73-02-07	--	0	0	0	--	.0
	74-07-16	--	0	0	0	--	--
	74-07-16	--	--	--	--	--	--
DX-68-23-201	69-01-11	.1	0	--	--	--	--
DX-68-23-203	73-02-07	--	0	0	0	--	.0
DX-68-23-213	73-06-07	--	0	0	0	--	--
	73-06-13	--	1	0	0	--	--
	73-06-13	--	0	0	0	--	.0
	75-01-22	--	--	--	--	--	--
	75-01-22	--	0	0	0	1.5	--
DX-68-23-214	73-06-06	--	25000	0	83	--	.0
	73-06-14	--	10000	1	23	--	.0
	75-01-22	--	--	--	--	--	--
	75-01-22	--	16	1	0	2.1	--
DX-68-23-215	73-06-06	--	1	0	0	--	--
DX-68-23-216	73-06-14	--	680	0	0	--	.0
	75-01-22	--	0	0	0	3.4	--
DX-68-23-217	73-06-07	--	12	0	0	--	--
DX-68-23-218	73-06-06	--	0	0	0	--	.0
	73-06-14	--	0	0	0	--	--
DX-68-23-219	73-06-06	--	1400	1	0	--	.0
	73-06-13	--	20000	1700	11000	--	--
	73-06-13	--	32000	3100	16000	--	.0
DX-68-23-301	68-03-13	--	--	--	--	--	--
	68-04-01	--	--	--	--	--	--
	69-03-07	--	--	--	--	--	--
	69-08-19	--	--	--	--	--	--
	70-03-03	--	--	--	--	--	--
	70-08-14	--	--	--	--	--	--
	71-02-17	.7	14	0	0	--	.0
	71-03-12	--	--	--	--	--	--
	71-07-20	--	--	--	--	--	--
	71-08-12	--	29	0	0	--	--
	72-03-27	--	--	--	--	--	--
	72-05-12	--	--	--	--	--	--
	73-02-06	--	16	0	0	--	.0
	73-05-15	--	--	--	--	--	--
	73-11-23	--	--	--	--	--	--
	74-04-02	--	0	0	0	.0	--
	74-12-16	--	--	--	--	--	--
DX-68-23-303	73-02-06	--	0	0	0	--	.0
	74-10-08	--	--	--	--	--	--
	74-16-08	--	0	0	0	.0	--
DX-68-23-304	73-02-07	--	1	0	0	--	.0
DX-68-23-305	73-02-06	--	0	--	0	--	.0
	74-10-08	--	--	--	--	--	--
	74-10-08	--	0	0	0	.0	--
DX-68-23-311	73-08-09	--	34	0	1	--	.0
	74-03-14	--	1	0	0	--	--
	74-03-14	--	0	0	1	.0	--
DX-68-23-312	73-08-09	--	4	0	0	--	.0
DX-68-23-313	74-04-03	--	0	0	0	.0	--
	74-05-08	--	0	0	0	9.0	--
DX-68-23-314	74-04-03	--	0	0	0	.0	--
	74-05-08	--	0	0	0	8.5	--
DX-68-23-504	74-07-16	--	--	--	--	2.3	--
	74-07-16	--	--	--	--	--	--
DX-68-23-601	73-02-06	--	0	0	0	--	.0
	74-10-08	--	--	--	--	--	--
	74-10-08	--	0	0	0	.0	--
DX-68-23-602	74-10-08	--	--	--	--	--	--
	74-10-08	--	0	0	0	.0	--
DX-68-23-605	73-07-13	--	0	0	0	--	.0
DX-68-23-606	73-07-12	--	0	0	0	--	.0
DX-68-23-607	73-07-11	--	0	0	0	--	.0
	74-11-05	--	--	--	--	--	--
	74-11-05	--	0	0	0	2.4	--
DX-68-23-608	73-07-12	--	3	0	0	--	.0
	74-11-05	--	0	0	0	4.0	--
DX-68-23-609	73-08-07	--	1	0	0	--	.0
	74-11-05	--	--	--	--	--	--

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD		INSTAN- TANEOUS FLOW RATE (GPM)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED SULFUM PLUS POTAS- SIUM (MG/L)
			TO SAM- PLING (MIN)	DEPTH OF WELL (FT)						
			(72004)	(72008)	(00059)	(00955)	(00915)	(00925)	(00930)	(00933)
DX-68-23-609	74-11-05	1135	--	200	--	11	81	13	6.9	--
DX-68-23-610	73-08-07	--	60	234	10	11	74	10	6.0	--
DX-68-23-611	73-08-07	--	60	230	10	11	71	10	6.1	--
	74-11-05	--	10	230	10	--	--	10	--	--
	74-11-05	0940	--	230	--	11	75	13	7.2	--
DX-68-23-612	73-07-12	1300	60	400	10	11	76	11	7.1	--
	73-08-07	--	60	400	10	11	73	11	6.1	--
	74-11-05	--	10	400	10	--	--	--	--	--
	74-11-05	1310	--	400	--	11	74	13	7.3	--
DX-68-23-613	73-07-13	--	60	275	10	10	71	10	6.2	--
DX-68-23-614	73-07-11	--	60	265	5.0	11	72	11	7.5	--
DX-68-23-615	73-07-11	--	60	--	10	11	72	12	7.2	--
DX-68-24-103	73-02-06	1304	10	130	20	--	--	--	--	--
	73-02-06	1354	60	130	20	--	71	17	--	--
	73-12-06	1410	10	130	20	--	--	--	--	--
DX-68-24-107	73-12-06	1500	60	130	20	12	73	17	8.9	--
	73-08-08	--	60	130	15	13	100	12	5.5	--
	74-05-08	1445	30	130	15	--	94	12	--	--
DX-68-24-108	73-08-09	--	60	150	15	13	110	12	6.3	--
DX-68-24-109	74-05-09	1530	60	120	10	--	95	15	--	--
DX-68-24-110	74-05-09	1205	60	150	--	--	100	14	--	--
DX-68-24-111	74-05-09	1010	60	135	10	--	100	15	--	--
DX-68-24-112	74-04-03	1545	60	105	15	12	82	14	6.4	--
	74-05-09	1620	60	105	15	--	78	14	--	--
DX-68-30-215	73-03-09	--	25	660	1300	--	94	13	--	4.6
LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED IODIDE (I) (MG/L) (71865)	TOTAL NITRATE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)
DX-68-23-609	74-11-05	1.0	254	0	10	10	--	--	3.4	.02
DX-68-23-610	73-08-07	1.1	234	0	16	12	.2	--	3.7	.00
DX-68-23-611	73-08-07	1.1	222	0	17	12	.2	--	3.4	--
	74-11-05	--	--	--	--	--	--	--	--	--
	74-11-05	1.0	250	0	11	11	--	--	3.6	.01
DX-68-23-612	73-07-12	.9	240	0	18	13	.2	--	3.6	.04
	73-08-07	1.1	234	0	16	12	.2	--	3.4	.00
	74-11-05	--	--	--	--	--	--	--	--	--
	74-11-05	.7	248	0	12	11	--	--	3.6	.01
DX-68-23-613	73-07-13	.8	218	0	16	13	.2	--	3.3	.01
DX-68-23-614	73-07-11	.9	232	0	20	14	.2	--	3.0	.01
DX-68-23-615	73-07-11	.9	232	0	20	13	.2	--	2.5	.00
DX-68-24-103	73-02-06	--	--	--	--	--	--	--	--	--
	73-02-06	--	264	0	26	13	--	--	1.6	.00
	73-12-06	--	--	--	--	--	--	--	--	--
DX-68-24-107	73-12-06	1.4	268	0	25	14	.1	--	1.1	.00
	73-08-08	1.0	330	0	13	10	.1	--	3.0	.00
	74-05-08	--	350	0	9.7	10	--	--	2.6	.02
DX-68-24-108	73-08-09	.9	358	0	10	12	.1	--	3.6	.00
DX-68-24-109	74-05-09	--	336	0	14	12	--	--	2.3	.02
DX-68-24-110	74-05-09	--	345	0	16	12	--	--	1.8	.04
DX-68-24-111	74-05-09	--	351	0	14	11	--	--	2.5	.02
DX-68-24-112	74-04-03	1.1	284	0	16	12	.1	--	1.2	.04
	74-05-08	--	286	0	16	11	--	--	1.3	.01
DX-68-30-215	73-03-09	--	320	0	14	9.6	--	--	2.2	.00

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM. OF CONSTIT- UENTS) (MG/L) (70301)	HAKU- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
DX-68-23-609	74-11-05	.02	249	220	12	6	.2	460	7.3	23.0
DX-68-23-610	73-08-07	.01	246	230	34	5	.2	486	7.0	22.8
DX-68-23-611	73-08-07	.00	238	220	36	6	.2	462	7.0	22.7
	74-11-05	--	--	--	--	--	--	--	--	--
	74-11-05	.02	249	230	23	6	.2	430	7.2	23.0
DX-68-23-612	73-07-12	.00	255	240	34	6	.2	484	7.0	22.5
	73-08-07	.01	246	230	36	5	.2	463	7.0	22.6
	74-11-05	--	--	--	--	--	--	--	--	--
	74-11-05	.03	252	240	35	6	.2	460	7.3	23.0
DX-68-23-613	73-07-13	.01	237	220	40	6	.2	455	6.9	23.0
DX-68-23-614	73-07-11	.01	251	230	35	7	.2	455	6.9	22.6
DX-68-23-615	73-07-11	.01	251	230	39	6	.2	476	--	22.8
DX-68-24-103	73-02-06	--	--	--	--	--	--	493	--	23.2
	73-02-06	.02	--	250	31	--	--	492	--	23.2
	73-12-06	--	--	--	--	--	--	487	--	22.8
DX-68-24-107	73-12-06	.00	283	250	32	7	.2	485	7.1	22.8
	73-08-08	.02	317	300	28	4	.1	611	6.9	22.7
	74-05-08	.01	--	300	5	--	--	570	6.7	23.0
DX-68-24-108	73-08-09	.02	341	320	30	4	.2	638	6.9	21.8
DX-68-24-109	74-05-09	.01	--	300	23	--	--	587	6.8	23.0
DX-68-24-110	74-05-09	.02	--	310	24	--	--	595	7.0	23.0
DX-68-24-111	74-05-09	.01	--	310	24	--	--	597	6.8	23.0
DX-68-24-112	74-04-03	.01	284	260	29	5	.2	505	7.0	23.5
	74-05-08	.01	--	250	18	--	--	496	6.8	23.0
DX-68-30-215	73-03-09	.02	--	290	26	--	--	539	--	22.5

LOCAL IDENT- IFIER	DATE OF SAMPLE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
DX-68-23-609	74-11-05	--	0	0	0	3.8	--
DX-68-23-610	73-08-07	--	2	0	0	--	.0
DX-68-23-611	73-08-07	--	0	0	0	--	.0
	74-11-05	--	--	--	--	--	--
	74-11-05	--	0	0	0	.2	--
DX-68-23-612	73-07-12	--	580	0	0	--	.0
	73-08-07	--	0	0	0	--	.0
	74-11-05	--	100	--	--	--	--
	74-11-05	--	0	0	0	3.2	--
DX-68-23-613	73-07-13	--	1	0	0	--	.0
DX-68-23-614	73-07-11	--	40	0	2	--	.0
DX-68-23-615	73-07-11	--	0	0	0	--	.0
DX-68-24-103	73-02-06	--	80	0	0	--	--
	73-02-06	--	20	0	0	--	.0
	73-12-06	--	0	0	0	--	--
DX-68-24-107	73-12-06	--	0	0	0	.0	--
	73-08-08	--	0	0	0	--	.0
	74-05-08	--	1	0	0	7.0	--
DX-68-24-108	73-08-09	--	27	0	0	--	.0
DX-68-24-109	74-05-09	--	31	0	0	8.0	--
DX-68-24-110	74-05-09	--	0	0	0	8.0	--
DX-68-24-111	74-05-09	--	9	0	0	--	--
DX-68-24-112	74-04-03	--	40	0	1	.0	--
	74-05-08	--	96	0	0	6.0	--
DX-68-30-215	73-03-09	--	0	0	0	--	.0

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	
DX-68-15-901	68-10-31	--	--	11220	--	0	--	40	--	--	
	74-12-16	--	--	--	--	--	--	--	--	--	
DX-68-16-502	68-11-21	--	230	300	10	--	--	--	--	--	
DX-68-16-802	69-01-11	--	190	10	10	0	--	70	--	--	
DX-68-22-901	74-07-16	--	255	300	15	--	--	--	<1	0	
	74-07-16	0900	255	--	--	0	1	--	<1	0	
DX-68-22-902	74-07-16	--	240	750	10	0	1	--	1	0	
DX-68-23-201	69-01-11	--	367	10	10	0	--	0	--	--	
DX-68-23-214	75-01-22	--	327	--	60	30	0	--	1	0	
	75-01-22	1505	327	10	60	30	0	--	1	0	
DX-68-23-216	75-01-22	1205	320	20	60	50	0	--	1	0	
DX-68-23-301	71-02-17	--	--	2000	--	--	0	--	--	--	
	71-07-20	--	--	--	--	--	--	--	--	--	
	72-05-12	--	--	4500	--	--	0	100	--	--	
	73-05-15	--	--	--	--	--	--	--	--	--	
	73-11-23	--	--	--	--	--	--	--	--	--	
	74-04-02	1010	--	2200	--	--	--	--	--	--	
	74-12-16	--	--	--	--	--	--	--	--	--	
DX-68-23-303	74-10-08	--	1045	4200	10	--	--	--	0	0	
	74-10-08	1115	1045	--	--	0	0	--	0	0	
DX-68-23-305	74-10-08	--	132	1200	10	--	--	--	0	0	
	74-10-08	1045	102	--	--	10	2	--	0	0	
DX-68-23-314	74-04-03	--	1145	10	60	--	--	--	--	--	
DX-68-23-504	74-07-16	--	215	500	10	--	--	--	1	0	
	74-07-16	1100	215	--	--	0	1	--	1	0	
DX-68-23-601	74-10-08	--	365	2100	10	--	--	--	0	0	
	74-10-08	1135	365	--	--	0	1	--	0	0	
DX-68-23-602	74-10-08	--	790	2750	420	--	--	--	0	0	
	74-10-08	1200	790	--	--	10	0	--	0	0	
DX-68-23-607	74-11-05	--	100	10	10	--	--	--	0	<10	
	74-11-05	1415	100	--	--	20	0	--	0	<10	
DX-68-23-612	74-11-05	--	400	10	10	--	--	--	0	<10	
	74-11-05	1310	400	--	--	30	1	--	0	<10	
DX-68-24-112	74-04-03	1545	105	15	60	--	--	--	--	--	
LOCAL IDENT- IFIER	DATE OF SAMPLE		DIS- SOLVED COBALT (CU) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DX-68-15-901	68-10-31	--	0	30	0	0	--	10	370	20	
	74-12-16	--	--	10	--	--	--	--	310	--	
DX-68-16-502	68-11-21	--	--	0	--	--	--	--	--	--	
DX-68-16-802	69-01-11	--	0	0	0	0	--	0	570	280	
DX-68-22-901	74-07-16	0	--	--	--	--	--	0	170	--	
	74-07-16	0	30	20	3	0	0	0	170	10	
DX-68-22-902	74-07-16	0	3	20	3	0	0	1	140	10	
DX-68-23-201	69-01-11	--	10	0	0	0	--	0	180	1000	
DX-68-23-214	75-01-22	1	1	10	6	0	0	3	230	360	
	75-01-22	1	1	10	6	0	0	3	230	360	
DX-68-23-216	75-01-22	2	0	0	2	0	0	0	240	240	
DX-68-23-301	71-02-17	--	1	--	0	--	--	<.5	--	10	
	71-07-20	--	--	0	--	0	--	--	600	--	
	72-05-12	--	3	0	0	0	--	0	--	50	
	73-05-15	--	--	0	--	0	--	--	610	--	
	73-11-23	--	--	0	--	0	--	--	500	--	
	74-04-02	--	--	0	--	--	--	--	--	--	
	74-12-16	--	--	10	--	--	--	--	620	--	
DX-68-23-303	74-10-08	0	--	--	--	--	--	2	420	--	
	74-10-08	0	2	20	1	0	0	2	620	10	
DX-68-23-305	74-10-08	0	--	--	--	--	--	2	650	--	
	74-10-08	0	4	10	2	0	0	2	650	20	
DX-68-23-314	74-04-03	--	--	0	--	--	--	--	--	--	
DX-68-23-504	74-07-16	0	--	--	--	--	--	1	580	--	
	74-07-16	0	8	20	2	0	0	1	580	10	
DX-68-23-601	74-10-08	0	--	--	--	--	--	2	410	--	
	74-10-08	0	2	20	0	0	0	2	550	0	
DX-68-23-602	74-10-08	0	--	--	--	--	--	1	410	--	
	74-10-08	0	5	10	0	0	0	1	410	0	
DX-68-23-607	74-11-05	0	--	--	--	--	--	0	400	--	
	74-11-05	0	2	10	0	0	<.1	0	400	200	
DX-68-23-612	74-11-05	0	--	--	--	--	--	0	310	--	
	74-11-05	0	3	10	0	0	<.1	0	310	320	
DX-68-24-112	74-04-03	--	--	170	--	--	--	--	--	--	

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

COMAL COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDO (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELURIN (UG/L) (39380)
DX-68-23-216	75-01-22	1205	320	20	60	.00	.00	.00	.00	.00
DX-68-23-301	68-04-01	--	--	300	--	.00	.00	.00	.00	.00

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)
DX-68-23-216	75-01-22	.00	.00	.00	.00	.0	.0	.00	.00	.00
DX-68-23-301	68-04-01	.00	.00	.00	.00	--	--	--	--	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
DX-68-23-216	75-01-22	.00	.00	.00	.00
DX-68-23-301	68-04-01	--	.00	.00	.00

1/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 350 cfs (cubic feet per second).
 2/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 350 cfs (cubic feet per second).
 3/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 322 cfs (cubic feet per second).
 4/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 204 cfs (cubic feet per second).
 5/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 326 cfs (cubic feet per second).
 6/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 274 cfs (cubic feet per second).
 7/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 246 cfs (cubic feet per second).
 8/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 238 cfs (cubic feet per second).
 9/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 105 cfs (cubic feet per second).
 10/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 187 cfs (cubic feet per second).
 11/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 290 cfs (cubic feet per second).
 12/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 308 cfs (cubic feet per second).
 13/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 312 cfs (cubic feet per second).
 14/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 370 cfs (cubic feet per second).
 15/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 446 cfs (cubic feet per second).
 16/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 385 cfs (cubic feet per second).
 17/ Sample collected at one of many spring discharge points. Total flow for Comal Springs was 412 cfs (cubic feet per second).

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

HAYS COUNTY										
LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
LW-58-58-403	68-04-09	--	--	390	350	--	--	--	--	--
	69-03-07	--	--	390	200	--	78	25	--	--
	69-08-19	--	--	390	300	--	--	--	--	--
	72-03-27	--	10	390	900	--	--	--	--	--
	72-07-31	--	--	390	800	11	76	25	6.0	--
LW-67-01-701 LP-67-01-P01	73-03-06	--	10	390	400	--	80	26	--	4.6
	68-10-31	--	10	--	5.0	11	92	12	--	14
	68-03-13	--	--	1/	--	--	--	--	--	--
	68-08-29	--	--	2/	125	--	--	--	--	--
	68-10-31	--	--	3/	--	11	82	19	--	7.4
	69-03-07	--	--	4/	--	--	84	18	--	--
	69-08-19	--	--	5/	--	--	--	--	--	--
	70-03-03	--	--	6/	--	--	--	--	--	--
	72-07-31	--	--	7/	250	11	81	17	10	--
	73-03-07	--	--	8/	--	--	84	18	10	--
	73-05-15	--	--	9/	--	11	84	17	9.6	--
	74-04-04	1245	--	10/	--	--	84	19	9.9	--
LW-67-01-A05 LP-67-01-A06	74-12-16	--	--	11/	--	11	86	17	13	--
	73-03-08	--	10	300	2700	--	90	17	--	9.9
LW-67-01-A06	73-03-07	--	10	128	2700	--	91	17	--	10
	74-04-04	1145	10	128	2700	12	90	17	11	--
	68-10-31	--	10	229	200	12	100	16	--	23
	69-08-29	--	10	230	20	11	88	16	--	9.9
LW-67-09-101 LR-68-16-603	70-05-19	--	10	230	20	--	--	--	--	--
LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MG/L) (00440)	CAR- BONATE (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITR- ATE PLUS NITR- ATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	
LW-58-58-403	68-04-09	--	326	0	27	9.7	--	--	--	
	69-03-07	--	326	0	27	9.4	--	--	--	
	69-08-19	--	324	0	28	9.0	--	--	--	
	72-03-27	--	334	0	26	12	--	--	--	
	72-07-31	1.2	330	0	27	8.5	.5	--	1.5	
LP-67-01-701 LP-67-01-A01	73-03-06	--	328	0	29	8.8	--	--	1.6	
	68-10-31	--	308	0	9.2	13	.2	.01	--	
	68-03-13	--	314	0	25	20	--	--	--	
	68-08-29	--	300	0	21	17	--	--	--	
	68-10-31	--	300	0	23	14	.3	.01	--	
	69-03-07	--	304	0	25	21	--	--	--	
	69-08-19	--	308	0	23	14	--	--	--	
	70-03-03	--	302	0	25	20	--	--	--	
	72-07-31	1.4	308	0	22	17	.3	--	1.3	
	73-03-07	1.6	308	0	26	19	.3	--	1.3	
	73-05-15	1.4	306	0	25	20	.2	--	1.0	
	74-04-04	1.5	324	0	21	19	--	--	1.3	
LW-67-01-A05 LP-67-01-A06	74-12-16	2.0	313	0	25	22	.2	--	--	
	73-03-08	--	320	0	24	16	--	--	1.8	
LP-67-01-A06	73-03-07	--	316	0	27	18	--	--	1.9	
	74-04-04	1.3	324	0	23	20	.2	--	1.8	
	68-10-31	--	342	0	36	23	.3	.01	--	
	69-08-29	--	312	0	21	16	.3	--	1.6	
LR-68-16-603	70-05-19	--	--	--	--	--	--	--	1.9	

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 IDENT- IFIER	DATE OF SAMPLE	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
LR-58-58-403	68-04-09	--	--	--	--	--	--	565	7.4	23.0
	69-03-07	--	--	300	30	--	--	571	7.3	22.0
	69-08-19	--	--	--	--	--	--	568	7.5	23.0
	72-03-27	--	--	--	--	--	--	582	7.5	22.0
	72-07-31	.00	330	310	36	4	.2	578	7.3	23.0
LR-67-01-701	73-03-06	.02	--	310	38	--	--	571	7.3	23.0
	68-10-31	.02	291	280	27	--	--	554	6.9	--
	68-03-13	--	--	--	--	--	--	578	7.1	22.0
	68-08-29	--	--	--	--	--	--	545	7.4	23.0
	68-10-31	.01	310	280	38	--	--	574	7.0	--
LR-67-01-801	69-03-07	--	--	280	35	--	--	565	7.4	22.0
	69-08-19	--	--	--	--	--	--	568	7.3	22.0
	70-03-03	--	--	--	--	--	--	582	7.1	22.0
	72-07-31	.01	312	270	20	7	.3	569	7.1	22.0
	73-03-07	.02	--	280	31	7	.3	567	--	--
LR-67-01-805	73-05-15	.00	322	290	34	7	.2	507	7.6	22.0
	74-04-04	.01	--	290	22	7	.3	560	7.1	22.0
	74-12-16	--	337	290	29	9	.3	549	6.6	22.0
	73-03-08	.02	--	300	32	--	--	577	--	22.5
	73-03-07	.02	--	300	38	--	--	585	--	23.0
LR-67-09-101	74-04-04	.01	--	300	29	7	.3	572	7.2	22.5
	68-10-31	.02	393	320	36	--	--	658	6.9	--
	69-08-29	--	322	290	30	--	--	567	7.2	23.0
LR-68-16-603	70-05-19	.00	--	--	--	--	--	599	7.3	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
LR-58-58-403	68-04-09	--	--	--	--	--	--
	69-03-07	--	--	--	--	--	--
	69-08-19	--	--	--	--	--	--
	72-03-27	--	--	--	--	--	--
	72-07-31	--	--	--	--	--	--
LR-67-01-701	73-03-06	--	4	0	0	--	.0
	68-10-31	.3	0	--	--	--	--
	68-03-13	--	--	--	--	--	--
	68-08-29	--	--	--	--	--	--
	68-10-31	.4	8	--	--	--	--
LR-67-01-801	69-03-07	--	--	--	--	--	--
	69-08-19	--	--	--	--	--	--
	70-03-03	--	--	--	--	--	--
	72-07-31	--	--	--	--	--	--
	73-03-07	--	67	3	0	--	.0
LR-67-01-805	73-05-15	--	--	--	--	--	--
	74-04-04	--	0	0	0	.0	--
	74-12-16	--	--	--	--	--	--
	73-03-08	--	1	0	0	--	.0
	73-03-07	--	0	0	0	--	.0
LR-67-09-101	74-04-04	--	0	0	0	.0	--
	68-10-31	.3	0	--	--	--	--
	69-08-29	--	--	--	--	--	--
LR-68-16-603	70-05-19	.1	60	8	31	--	--

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

HAYS COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)
LR-58-58-403	72-07-31	--	390	800	--	--	--	--	0	--
LR-67-01-701	68-10-31	--	--	5.0	10	0	10	20	30	0
LR-67-01-801	68-10-31	--	--	--	--	0	10	0	0	0
	72-07-31	--	--	250	--	--	--	--	10	--
	73-03-07	--	--	--	--	--	80	--	10	--
	73-05-15	--	--	--	--	--	--	--	0	--
	74-12-16	--	--	--	--	--	--	--	0	--
LR-67-01-806	74-04-04	1145	128	--	--	--	--	--	10	--
LR-67-09-101	68-10-31	--	229	200	10	100	50	0	10	0
LR-68-16-603	69-08-29	--	230	20	10	--	--	--	0	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
LR-58-58-403	72-07-31	0	--	12100	--
LR-67-01-701	68-10-31	20	0	170	50
LR-67-01-801	68-10-31	0	0	570	20
	72-07-31	0	--	580	--
	73-03-07	0	--	--	--
	73-05-15	0	--	610	--
	74-12-16	--	--	600	--
LR-67-01-806	74-04-04	--	--	--	--
LR-67-09-101	68-10-31	0	0	590	100
LR-68-16-603	69-08-29	--	--	--	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL D-ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
LR-67-01-801	68-04-01	--	.00	.00	.00	.00	.00	.00	.00	.00

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL LINDANE (UG/L) (39340)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
LR-67-01-801	68-04-01	.00	.00	.00	.00

- 1/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 235 cfs (cubic feet per second).
2/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 162 cfs (cubic feet per second).
3/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 142 cfs (cubic feet per second).
4/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 142 cfs (cubic feet per second).
5/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 162 cfs (cubic feet per second).
6/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 184 cfs (cubic feet per second).
7/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 162 cfs (cubic feet per second).
8/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 191 cfs (cubic feet per second).
9/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 211 cfs (cubic feet per second).
10/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 174 cfs (cubic feet per second).
11/ Sample collected at one of many spring discharge points. Total flow for San Marcos Springs was 237 cfs (cubic feet per second).

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

MEDINA COUNTY

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)
TD-68-26-701	74-03-12	1320	240	750	1000	12	73	20	7.1	--
TD-68-33-301	68-05-23	--	--	805	800	--	--	--	--	--
	70-05-13	--	--	805	750	12	68	18	6.0	--
	72-04-11	1420	--	805	1100	--	68	18	--	--
	74-03-12	--	30	805	1100	--	68	19	7.0	--
TD-68-34-103	72-08-02	--	240	1015	750	--	66	19	6.8	--
TD-68-34-401	72-04-11	1140	210	705	1700	16	66	18	--	7.4
TD-68-41-303	72-04-11	1335	--	717	350	17	69	14	--	8.7
	74-02-21	1015	--	717	380	--	68	15	8.0	--
TD-69-39-501	74-02-22	--	--	680	1200	12	74	11	7.4	--
TD-69-39-502	70-05-13	--	60	530	800	11	80	10	11	--
TD-69-40-402	68-05-29	--	--	382	1000	--	--	--	--	--
TD-69-46-601	72-04-25	--	--	1289	350	12	70	14	6.8	--
	75-01-23	1345	--	1289	350	13	67	13	6.7	--
TD-69-47-301	68-04-05	--	120	1510	1000	--	--	--	--	--
	70-07-27	--	--	1510	1000	12	64	15	6.6	--
	71-07-28	--	--	1510	1000	12	65	16	6.8	--
TD-69-47-303	75-01-23	1530	10	1803	1150	13	71	15	6.9	--
TD-69-48-102	72-04-25	--	--	1654	500	12	62	17	7.0	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAN- MONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
TD-68-26-701	74-03-12	1.4	270	0	51	13	.2	1.0	.03	.01
TD-68-33-301	68-05-23	--	--	--	--	--	--	--	--	--
	70-05-13	1.4	230	0	50	11	.2	.50	.00	.00
	72-04-11	--	230	0	49	12	--	.50	.00	.00
	74-03-12	1.4	184	0	42	12	.2	.55	.04	.01
TD-68-34-103	72-08-02	1.4	242	0	50	12	.4	.54	--	.00
TD-68-34-401	72-04-11	--	224	0	50	12	.2	.40	.00	.00
TD-68-41-303	72-04-11	--	252	0	15	14	.2	1.8	.08	.00
	74-02-21	1.2	250	0	14	17	.2	1.8	.05	.01
TD-69-39-501	74-02-22	1.2	249	0	11	13	.2	5.5	--	.00
TD-69-39-502	70-05-13	1.1	252	0	20	20	.1	2.5	.00	.00
TD-69-40-402	68-05-29	--	--	--	--	--	--	--	--	--
TD-69-46-601	72-04-25	1.0	256	0	16	14	.2	1.3	--	.00
	75-01-23	1.4	240	0	17	14	.2	1.7	.03	.03
TD-69-47-301	68-04-05	--	--	--	--	--	--	--	--	--
	70-07-27	1.2	253	0	16	12	.3	1.2	--	.00
	71-07-28	1.2	250	0	16	12	.2	.90	--	--
TD-69-47-303	75-01-23	1.1	250	0	17	14	.2	1.6	.00	.03
TD-69-48-102	72-04-25	1.1	248	0	17	13	.3	1.0	--	.00

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

MEDINA COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)
T0-68-26-701	74-03-12	311	270	43	5	.2	516	7.2	23.0	--
T0-68-33-301	68-05-23	--	--	--	--	--	--	--	--	--
	70-05-13	280	240	55	5	.2	484	7.1	21.5	.2
	72-04-11	--	240	55	--	--	486	7.4	22.0	--
	74-03-12	--	250	94	6	.2	489	7.7	21.5	--
T0-68-34-103	72-08-02	--	240	45	6	.2	499	7.3	23.0	--
T0-68-34-401	72-04-11	282	240	55	--	--	483	7.4	22.0	--
T0-68-41-303	72-04-11	270	230	23	--	--	472	7.4	24.0	--
	74-02-21	--	230	27	7	.2	472	7.3	24.0	--
T0-69-39-501	74-02-22	252	230	26	7	.2	472	7.0	23.0	--
T0-69-39-502	70-05-13	277	240	34	9	.3	503	7.1	21.5	.2
T0-69-40-402	68-05-29	--	--	--	--	--	--	--	--	--
T0-69-46-601	72-04-25	260	230	22	6	.2	471	7.2	24.0	--
	75-01-23	254	220	19	6	.2	456	7.1	24.0	--
T0-69-47-301	68-04-05	--	--	--	--	--	--	--	--	--
	70-07-27	252	220	14	6	.2	433	7.0	25.0	--
	71-07-28	253	230	23	6	.2	429	7.4	--	--
T0-69-47-303	75-01-23	262	240	34	6	.2	550	7.1	24.0	--
T0-69-48-102	72-04-25	252	230	21	6	.2	473	7.4	26.0	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
T0-68-26-701	74-03-12	0	0	0	.0	--
T0-68-33-301	68-05-23	--	--	--	--	--
	70-05-13	0	--	0	--	--
	72-04-11	0	0	0	--	.0
	74-03-12	--	--	--	2.0	--
T0-68-34-103	72-08-02	--	--	--	--	--
T0-68-34-401	72-04-11	1	0	0	--	.0
T0-68-41-303	72-04-11	0	0	0	--	.0
	74-02-21	0	0	0	.5	--
T0-69-39-501	74-02-22	--	--	--	--	--
T0-69-39-502	70-05-13	34	--	0	--	--
T0-69-40-402	68-05-29	--	--	--	--	--
T0-69-46-601	72-04-25	--	--	--	--	--
	75-01-23	0	0	0	3.3	--
T0-69-47-301	68-04-05	--	--	--	--	--
	70-07-27	--	--	--	--	--
	71-07-28	--	--	--	--	--
T0-69-47-303	75-01-23	0	0	0	2.4	--
T0-69-48-102	72-04-25	--	--	--	--	--

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

MEDINA COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
TD-68-33-301	72-04-11	1420	805	1100	--	--	0	--	--	--
TD-68-34-103	72-08-02	--	1015	750	240	--	--	--	--	--
TD-68-34-401	72-04-11	1140	705	1700	210	--	0	--	--	--
TD-68-41-303	72-04-11	1335	717	350	--	--	0	--	--	--
TD-69-39-501	74-02-22	--	690	1200	--	--	--	--	--	--
TD-69-46-601	72-04-25	--	1289	350	--	--	--	--	--	--
TD-69-47-301	75-01-23	1345	1289	350	--	30	1	1	0	0
TD-69-47-301	70-07-27	--	1510	1000	--	0	--	--	--	--
TD-69-47-303	71-07-28	--	1510	1000	--	--	--	--	--	--
TD-69-47-303	75-01-23	1530	1893	1150	10	40	1	1	0	1
TD-69-48-102	72-04-25	--	1654	500	--	--	--	--	--	--

LOCAL IDENT- IFIER	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 MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
TD-68-33-301	72-04-11	4	--	0	--	.4	--	--	40
TD-68-34-103	72-08-02	--	10	--	0	--	--	740	--
TD-68-34-401	72-04-11	2	--	0	--	.2	--	--	30
TD-68-41-303	72-04-11	5	--	0	--	.3	--	--	50
TD-69-39-501	74-02-22	--	0	--	0	--	--	100	--
TD-69-46-601	72-04-25	--	0	--	0	--	--	--	--
TD-69-47-301	75-01-23	2	0	3	0	.0	2	330	20
TD-69-47-301	70-07-27	10	0	--	--	--	--	280	40
TD-69-47-303	71-07-28	--	0	--	0	--	--	300	--
TD-69-47-303	75-01-23	1	0	4	0	.0	1	360	20
TD-69-48-102	72-04-25	--	10	--	0	--	--	--	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDO (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)
TD-68-33-301	68-05-23	--	805	800	--	.00	.00	.00	.00	.00
TD-69-40-402	68-05-29	--	382	1000	--	.00	.00	.00	.00	.00
TD-69-47-301	68-04-05	--	1510	1000	120	.00	.00	.00	.00	.00

LOCAL IDENT- IFIER	DATE OF SAMPLE	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- EPOXIDE (UG/L) (39420)	TOTAL LINDANE (UG/L) (39340)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
TD-68-33-301	68-05-23	.00	.00	.00	.00	.00	.00	.00
TD-69-40-402	68-05-29	.00	.00	.00	.00	.00	.00	.00
TD-69-47-301	68-04-05	.00	.00	.00	.00	.00	.00	.00

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

UVALDE COUNTY										
LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM POTAS- SIUM (MG/L) (00933)
YP-69-35-R01	68-08-01	--	--	600	800	--	--	--	--	--
YP-69-35-R02	68-06-12	--	--	650	800	--	--	--	--	--
YP-69-35-R04	68-05-21	--	--	190	4.0	--	--	--	--	--
	68-06-13	--	3	190	2.0	--	--	--	--	--
	68-08-10	--	--	190	3.0	--	--	--	--	--
YP-69-35-902	75-01-15	--	1440	847	1200	13	87	21	11	--
YP-69-36-701	70-05-13	--	120	500	500	12	60	15	8.3	--
YP-69-36-703	71-02-11	--	10	--	35	12	69	14	--	6.3
YP-69-41-501	68-06-13	--	--	297	1287	--	--	--	--	--
YP-69-41-505	70-05-13	--	--	260	1500	11	62	11	8.5	--
YP-69-43-102	68-07-23	--	10	685	1600	10	68	14	5.7	--
	70-05-13	--	--	685	1600	12	69	13	5.2	--
	72-10-11	--	--	685	1800	7.7	73	15	6.9	--
YP-69-43-104	71-02-10	--	--	760	1200	12	59	13	--	.5
YP-69-43-107	71-02-10	--	--	878	1577	12	69	13	--	5.1
	74-02-22	--	--	878	1200	11	70	13	6.4	--
YP-69-44-101	73-02-20	--	--	561	--	13	64	15	7.0	--
YP-69-44-103	74-07-08	--	--	675	1500	13	78	10	7.9	--
YP-69-44-502	72-04-26	--	--	1380	1000	12	71	14	9.2	--
YP-69-45-404	68-05-21	--	3	1493	300	--	--	--	--	--
	71-07-28	--	--	1493	500	12	77	22	19	--
YP-69-50-105	72-10-10	--	--	945	2000	7.6	94	11	9.2	--
YP-69-50-107	69-08-18	--	10	146	10	--	--	--	--	--
	69-10-23	--	10	146	10	--	--	--	--	--
YP-69-50-203	70-03-23	--	--	525	1400	13	86	9.7	10	--
	74-09-09	1530	10	525	1400	13	88	11	13	--
YP-69-50-506	74-09-09	--	30	525	480	--	--	--	--	--
	74-09-09	1600	--	525	--	13	95	8.0	19	--
LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)
YP-69-35-R01	68-08-01	--	--	--	--	--	--	--	--	--
YP-69-35-R02	68-06-12	--	--	--	--	--	--	--	--	--
YP-69-35-R04	68-05-21	--	--	--	--	--	--	--	--	--
	68-06-13	--	--	--	--	--	--	--	--	--
	68-08-10	--	--	--	--	--	--	--	--	--
YP-69-35-902	75-01-15	1.4	224	0	16	84	.1	--	--	--
YP-69-36-701	70-05-13	1.0	232	0	14	13	.1	2.1	.00	.00
YP-69-36-703	71-02-11	--	242	0	13	13	.1	3.6	--	--
YP-69-41-501	68-06-13	--	--	--	--	--	--	--	--	--
YP-69-41-505	70-05-13	1.1	214	0	15	15	.1	2.1	.00	.00
YP-69-43-102	68-07-23	.9	243	0	12	13	.1	1.7	--	--
	70-05-13	1.0	244	0	12	12	.0	2.5	.00	.00
	72-10-11	1.3	252	0	12	17	.1	1.4	--	.00
YP-69-43-104	71-02-10	--	202	0	11	12	.1	2.1	--	--
YP-69-43-107	71-02-10	--	238	0	12	12	.0	3.4	--	--
	74-02-22	.9	247	0	11	13	.1	3.4	--	.00
YP-69-44-101	73-02-20	1.1	229	0	11	19	.2	2.1	--	.00
YP-69-44-103	74-07-08	1.1	247	0	11	23	.1	2.0	--	--
YP-69-44-502	72-04-26	1.1	246	0	21	23	.4	1.1	--	.00
YP-69-45-404	68-05-21	--	--	--	--	--	--	--	--	--
	71-07-28	2.7	254	0	83	18	.4	1.3	--	--
YP-69-50-105	72-10-10	1.5	248	0	15	45	.2	1.4	--	.00
YP-69-50-107	69-08-18	--	--	--	--	--	--	--	--	--
	69-10-23	--	--	--	--	--	--	--	--	--
YP-69-50-203	70-03-23	1.1	264	0	13	29	.1	1.8	.00	.01
	74-09-09	1.5	265	0	15	38	--	2.5	.07	.02
YP-69-50-506	74-09-09	--	--	--	--	--	--	--	--	--
	74-09-09	1.9	275	0	23	42	--	3.6	.02	.01

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

UVALDE COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	RIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)
YP-69-35-A01	68-08-01	--	--	--	--	--	--	--	--	--
YP-69-35-A02	68-06-12	--	--	--	--	--	--	--	--	--
YP-69-35-A04	68-05-21	--	--	--	--	--	--	--	--	--
	68-06-13	--	--	--	--	--	--	--	--	--
	68-08-10	--	--	--	--	--	--	--	--	--
YP-69-35-902	75-01-15	356	300	120	7	.3	641	7.0	22.5	--
YP-69-36-701	70-05-13	238	210	21	8	.2	439	7.2	--	.1
YP-69-36-703	71-02-11	--	230	31	--	--	453	7.2	23.0	--
YP-69-41-501	68-06-13	--	--	--	--	--	--	--	--	--
YP-69-41-505	70-05-13	229	200	25	8	.3	421	7.1	21.0	.1
YP-69-43-102	68-07-23	243	230	28	5	.2	440	7.4	23.0	--
	70-05-13	244	230	26	5	.2	451	6.9	22.0	.0
	72-10-11	257	240	37	6	.2	425	7.4	22.5	--
YP-69-43-104	71-02-10	--	200	35	--	--	335	7.3	--	--
YP-69-43-107	71-02-10	255	230	31	--	--	413	7.2	23.0	--
	74-02-22	248	230	26	6	.2	463	7.2	22.5	--
YP-69-44-101	73-02-20	244	220	34	6	.2	448	7.4	22.0	--
YP-69-44-103	74-07-08	275	240	34	7	.2	482	7.0	24.5	--
YP-69-44-502	72-04-26	278	240	39	8	.3	494	7.2	29.5	--
YP-69-45-A04	68-05-21	--	--	--	--	--	--	--	--	--
	71-07-28	360	280	75	13	.5	575	7.4	--	--
YP-69-50-105	72-10-10	306	280	77	7	.2	562	7.1	24.0	--
YP-69-50-107	69-08-18	--	--	--	--	--	--	--	--	--
	69-10-23	--	--	--	--	--	--	--	--	--
YP-69-50-203	70-03-23	292	260	38	8	.3	538	7.1	23.0	.0
	74-09-09	310	270	48	10	.3	571	7.8	24.0	--
YP-69-50-506	74-09-09	--	--	--	--	--	--	--	--	--
	74-09-09	338	270	45	13	.5	611	7.5	24.0	--

LOCAL IDENT- IFIER	DATE OF SAMPLE	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOL- VED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
YP-69-35-801	68-08-01	--	--	--	--	--
YP-69-35-802	68-06-12	--	--	--	--	--
YP-69-35-804	68-05-21	--	--	--	--	--
	68-06-13	--	--	--	--	--
	68-08-10	--	--	--	--	--
YP-69-35-902	75-01-15	--	--	--	--	--
YP-69-36-701	70-05-13	8	--	0	--	--
YP-69-36-703	71-02-11	--	--	--	--	.0
YP-69-41-501	68-06-13	--	--	--	--	--
YP-69-41-505	70-05-13	11	--	0	--	--
YP-69-43-102	68-07-23	--	--	--	--	--
	70-05-13	48	--	0	--	--
	72-10-11	--	--	--	--	--
YP-69-43-104	71-02-10	--	--	--	--	.0
YP-69-43-107	71-02-10	--	--	--	--	.0
	74-02-22	--	--	--	--	--
YP-69-44-101	73-02-20	--	--	--	--	--
YP-69-44-103	74-07-08	--	--	--	--	--
YP-69-44-502	72-04-26	--	--	--	--	--
YP-69-45-A04	68-05-21	--	--	--	--	--
	71-07-28	--	--	--	--	--
YP-69-50-105	72-10-10	--	--	--	--	--
YP-69-50-107	69-08-18	--	--	--	--	--
	69-10-23	--	--	--	--	--
YP-69-50-203	70-03-23	0	0	0	--	--
	74-09-09	0	0	0	2.4	--
YP-69-50-506	74-09-09	--	--	--	--	--
	74-09-09	0	0	0	1.7	--

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

UVALDE COUNTY--CONTINUED

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)
YP-69-35-902	75-01-15	--	847	1200	1440	--	--	--	--	--
YP-69-36-703	71-02-11	--	--	35	10	--	--	--	--	--
YP-69-43-102	72-10-11	--	685	1800	--	--	--	--	--	--
YP-69-43-104	71-02-10	--	760	1200	--	--	--	--	--	--
YP-69-43-107	71-02-10	--	878	1577	--	--	--	--	--	--
	74-02-22	--	878	1200	--	--	--	--	--	--
YP-69-44-101	73-02-20	--	561	--	--	--	--	--	--	--
YP-69-44-103	74-07-08	--	675	1500	--	--	--	--	--	--
YP-69-44-502	72-04-26	--	1380	1000	--	--	--	--	--	--
YP-69-45-404	71-07-28	--	1493	500	--	--	--	--	--	--
YP-69-50-105	72-10-10	--	945	2000	--	--	--	--	--	--
YP-69-50-203	70-03-23	--	525	1400	--	0	0	--	--	--
	74-09-09	1530	525	1400	10	20	0	0	0	0
YP-69-50-506	74-09-09	--	525	480	30	--	--	0	0	0
	74-09-09	1600	525	--	--	0	1	0	0	0

LOCAL IDENT- IFIER	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 MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
YP-69-35-902	75-01-15	--	10	--	--	--	--	430	--
YP-69-36-703	71-02-11	--	10	--	--	--	--	--	--
YP-69-43-102	72-10-11	--	0	--	10	--	--	270	--
YP-69-43-104	71-02-10	--	30	--	--	--	--	--	--
YP-69-43-107	71-02-10	--	10	--	--	--	--	--	--
	74-02-22	--	20	--	10	--	--	400	--
YP-69-44-101	73-02-20	--	0	--	0	--	--	400	--
YP-69-44-103	74-07-08	--	20	--	--	--	--	290	--
YP-69-44-502	72-04-26	--	0	--	0	--	--	4800	--
YP-69-45-404	71-07-28	--	0	--	0	--	--	--	700
YP-69-50-105	72-10-10	--	0	--	5	--	--	310	--
YP-69-50-203	70-03-23	10	0	0	0	--	--	--	10
	74-09-09	2	20	0	0	1.9	0	260	10
YP-69-50-506	74-09-09	--	--	--	--	--	0	360	--
	74-09-09	1	20	1	0	.0	0	360	10

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	TOTAL DEPTH OF WELL (FT) (72008)	INSTAN- TANEOUS FLOW RATE (GPM) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	ALDRIN (UG/L) (39330)	DDD (UG/L) (39360)	ODE (UG/L) (39365)	DDT (UG/L) (39370)	DDE (UG/L) (39380)
YP-69-35-801	68-08-01	--	600	800	--	.00	.00	.00	.00	.00
YP-69-35-802	68-06-12	--	650	800	--	.00	.00	.00	.00	.00
YP-69-35-804	68-05-21	--	190	4.0	--	.00	.00	.02	.01	.00
	68-06-13	--	190	2.0	3	.00	.00	.04	1.0	.00
	68-08-10	--	190	3.0	--	.00	.00	.01	.06	.00
YP-69-41-501	68-06-13	--	297	1287	--	.00	.00	.00	.00	.00
YP-69-45-404	68-05-21	--	1493	300	3	.00	.00	.00	.00	.00
YP-69-50-107	69-08-18	--	146	10	10	.00	.00	.00	.00	.08
	69-10-23	--	146	10	10	.00	.00	.00	.00	.00

LOCAL IDENT- IFIER	DATE OF SAMPLE	ENDRIN (UG/L) (39390)	HEPTA- CHLOR (UG/L) (39410)	HEPTA- CHLOR EPOXIDE (UG/L) (39420)	LINDANE (UG/L) (39340)	2,4-D (UG/L) (39730)	SILVEX (UG/L) (39760)	2,4,5-T (UG/L) (39740)
YP-69-35-801	68-08-01	.00	.00	.00	.00	--	--	--
YP-69-35-802	68-06-12	.00	.00	.00	.00	--	--	--
YP-69-35-804	68-05-21	.00	.00	.00	.00	.00	.00	.00
	68-06-13	.00	.00	.00	.00	--	--	--
	68-08-10	.00	.00	.00	.00	--	--	--
YP-69-41-501	68-06-13	.00	.00	.00	.00	.00	.00	.00
YP-69-45-404	68-05-21	.00	.00	.00	.00	.00	.00	.00
YP-69-50-107	69-08-18	.00	.00	.00	.00	.00	.00	.00
	69-10-23	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA

Site 2, East Frio River, 1 mile above mouth at Leaky, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
AUG. 08, 1968	1015	48	258	0	7.6	12	.2	.00	.01	--	243	32
JULY 29, 1969	1130	42	--	--	--	--	--	--	--	--	--	--
FEB. 04, 1970	0945	60	--	--	--	--	2.0	.00	.00	--	--	--
JUNE 02, 1971	1445	29	--	--	--	--	.7	.00	.00	--	--	--

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AUG. 28, 1968	447	7.6	24.0	7.9	96	.4	9200	--	--	--
JULY 29, 1969	444	7.5	26.0	8.8	106	--	5000	--	--	--
FEB. 04, 1970	446	--	13.0	--	--	.1	32	8	48	--
JUNE 02, 1971	435	7.7	25.5	9.4	113	.4	5200	4	16	.07

Site 3, Frio River at Highway 1120, 1 mile below Leaky, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
AUG. 08, 1968	0930	18	226	0	7.4	12	.3	.00	.01	--	201	16
JULY 29, 1969	0930	5.8	--	--	--	--	.2	.00	.01	--	--	--

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)
AUG. 08, 1968	395	7.6	25.0	7.3	90	.5	9700	--	--	--
JULY 29, 1969	395	7.6	26.0	9.2	111	.7	2200	--	--	--

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 4, Frio River at Highway 1050 above Garner Park

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
AUG. 28, JULY 29, 1968	1115	65	250	0	7.6	14	1.3	.00	.00	--	231	26
FEB. 04, 1970	--	60	--	--	--	--	2.1	.04	.00	--	--	--
JUNE 02, 1971	1315	34	--	--	--	--	.8	.00	.00	--	--	--

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AUG. 28, 1968	452	7.7	25.0	9.0	111	.6	5600	--	--	--	--
JULY 29, 1969	444	7.5	29.0	11.0	141	--	0	--	--	--	--
FEB. 04, 1970	445	--	13.0	9.2	--	.1	24	0	42	--	--
JUNE 02, 1971	437	7.7	27.0	9.2	114	1.2	470	8	44	--	.00

Site 5, Frio River at Mager's Crossing below Garner Park

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
AUG. 28, 1968	1150	60	231	0	12	14	1.0	.00	.01	--	216	27
JULY 29, 1969	1245	21	--	--	--	--	.6	.00	.02	--	--	--
FEB. 04, 1970	--	70	--	--	--	--	2.1	.10	.00	--	--	--
JUNE 02, 1971	1130	32	--	--	--	--	.7	.00	.03	--	--	--

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
AUG. 28, 1968	427	7.8	27.0	9.4	119	.8	1700	--	--	--	--
JULY 29, 1969	403	7.7	29.0	8.9	114	1.1	12000	--	--	--	--
FEB. 04, 1970	457	--	11.0	--	--	.2	48	10	48	--	--
JUNE 02, 1971	405	7.7	26.0	8.4	102	1.1	20000	42	100	--	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 6 (08195000), Frio River at Concan, Texas

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)
MAY , 1968										
28...	1226	--	--	64	14	--	--	228	0	--
AUG.										
07...	1305	--	--	--	--	--	--	217	0	--
28...	1330	72	--	--	--	--	--	216	0	13
JULY, 1969										
29...	1350	18	--	--	--	--	--	204	0	16
FEB., 1970										
04...	1400	101	--	--	--	--	--	--	--	--
JUNE, 1971										
02...	1600	35	--	--	--	--	--	--	--	--
JAN., 1974										
22...	1115	122	11	73	15	8.1	1.1	242	0	31
MAR.										
12...	1400	91	11	59	15	8.2	1.0	222	0	16
MAY										
15...	1130	153	11	62	14	6.9	.9	236	0	14
JULY										
10...	1400	51	12	53	14	7.7	1.0	210	0	18
SEP.										
10...	1010	125	12	66	15	8.3	1.3	248	0	16
NOV.										
19...	1100	--	11	65	16	7.1	1.0	256	0	14
JAN., 1975										
14...	0930	--	11	61	14	6.7	.9	246	0	15
DATE		DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
MAY , 1968										
28...	16	--	--	--	--	--	--	--	--	--
AUG.										
07...	15	--	--	--	--	--	--	--	--	--
28...	15	--	--	--	--	.00	--	--	.01	--
JULY, 1969										
29...	16	--	--	--	--	.00	--	--	.01	--
FEB., 1970										
04...	--	--	--	--	--	.00	--	--	.00	--
JUNE, 1971										
02...	--	--	--	--	--	.00	--	--	.00	--
JAN., 1974										
22...	18	--	--	2.5	.00	.02	.25	--	.00	277
MAR.										
12...	15	--	--	1.6	.01	.07	.13	.20	.06	235
MAY										
15...	13	--	--	1.7	.00	.02	.08	.10	.01	239
JULY										
10...	17	--	--	.55	.00	.05	.08	.13	.00	227
SEP.										
10...	15	--	--	1.5	.00	.06	.17	.23	.01	256
NOV.										
19...	13	--	--	1.3	.01	.02	.39	.41	.04	253
JAN., 1975										
14...	14	--	.1	1.3	.01	.00	.20	.20	.01	244

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 6 (08195000), Prio River at Concan, Texas--Continued

DATE	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)
MAY, 1968									
28...	--	--	217	30	--	439	7.6	25.0	--
AUG.									
17...	--	--	212	34	--	413	7.9	28.0	--
28...	--	--	--	--	--	414	7.9	28.0	--
JULY, 1969									
29...	--	--	--	--	--	362	7.9	30.0	--
FEB., 1970									
04...	--	--	--	--	--	439	--	11.0	--
JUNE, 1971									
02...	--	--	--	--	--	388	7.7	28.0	--
JAN., 1974									
22...	0	0	240	46	.2	497	7.7	18.0	0
MAR.									
12...	0	0	210	27	.2	432	7.8	21.5	0
MAY									
15...	0	0	210	19	.2	424	8.0	24.5	0
JULY									
10...	2	0	190	18	.2	415	7.9	27.5	0
SEP.									
10...	0	0	230	23	.2	437	7.5	23.5	0
NOV.									
19...	1	1	230	18	.2	446	7.9	19.0	0
JAN., 1975									
14...	--	--	210	8	.2	445	7.8	8.5	0
DATE	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
MAY, 1968									
28...	--	--	--	--	--	--	--	--	--
AUG.									
17...	--	--	--	--	--	--	--	--	--
28...	--	8.9	114	.5	6600	--	--	--	--
JULY, 1969									
29...	--	8.7	114	.7	8200	--	--	--	--
FEB., 1970									
04...	--	--	--	.2	44	2	34	--	--
JUNE, 1971									
02...	--	9.0	115	.4	1400	4	50	--	.0
JAN., 1974									
22...	0	8.3	87	.1	140	28	32	.0	--
MAR.									
12...	2	8.4	94	.4	100	16	47	.0	--
MAY									
15...	0	7.6	90	.0	128	11	103	6.0	--
JULY									
10...	0	9.3	116	.6	2100	12	80	3.1	--
SEP.									
10...	0	8.0	93	.3	480	12	58	2.9	--
NOV.									
19...	0	9.4	100	.3	80	25	68	2.1	--
JAN., 1975									
14...	6	--	--	.4	66	6	18	.8	--

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 6 (08195000), Frio River at Concan, Texas--Continued

		DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)			
DATE	TIME	JAN.. 1974 22... 1115	0	0	50	2	0	0	4		
MAY	15...	1130	0	0	40	0	0	0	0		
JULY	10...	1400	0	1	70	0	0	0	2		
JAN.. 1975	14...	0930	0	0	50	0	0	0	2		
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)		
JAN.. 1974	22...	90	3	0	0	.0	2	440	20		
MAY	15...	20	0	0	40	.0	0	270	10		
JULY	10...	20	2	0	0	.0	1	310	10		
JAN.. 1975	14...	20	2	10	0	.0	4	260	20		
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
AUG.. 1968	28...	1330	72	28.0	.00	.00	.00	.00	.00	.00	.00
JAN.. 1974	22...	1115	122	18.0	.00	.00	.00	.00	.00	.00	.00
MAY	15...	1130	153	24.5	.00	.00	.00	.00	.00	.00	.00
SEP.	10...	1010	125	23.5	.00	.00	.00	.00	.00	.00	.00
DATE	TIME	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AUG.. 1968	28...	.00	--	--	--	--	--	--	.00	.00	.00
JAN.. 1974	22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY	15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP.	10...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 7, Nueces River at county road crossing, 5 miles north of Vance, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
FEB. 02, 1970	1600	15	--	--	--	--	1.9	.00	.00	--	--	--
DATE		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	
FEB. 02, 1970	406	--	--	14.5	--	--	.0	120	1	88	--	

Site 8, Pullin Creek at county road crossing, 4 miles northwest of Barksdale, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
FEB. 02, 1970	1450	15	--	--	--	--	3.2	.00	.01	--	--	--
DATE		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	
FEB. 02, 1970	416	--	--	14.5	--	--	.1	92	32	33	--	

Site 9, Nueces River at Highway 55, 3.5 miles south of Camp Wood, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
FEB. 02, 1970	1325	30	--	--	--	--	2.5	.15	.02	--	--	--
DATE		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	
FEB. 02, 1970	399	--	--	13.0	--	--	1.0	1500	20	160	--	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 10 (08190000), Nueces River at Laguna, Texas

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
MAY , 1968												
29...	1635	--	--	46	15	--	--	180	0	--	13	--
JULY												
03...	1245	--	--	--	--	--	--	204	0	--	15	--
AUG.												
08...	1755	--	--	--	--	--	--	204	0	--	15	--
FEB., 1970												
02...	1215	143	--	58	14	9.1	.9	216	0	15	16	--
AUG., 1971												
26...	1235	599	--	--	--	--	--	246	0	15	17	--
JAN., 1974												
22...	0915	184	11	65	15	11	1.1	218	0	17	21	--
MAR.												
12...	1600	92	11	60	14	9.8	1.1	220	0	17	20	--
MAY												
15...	0930	178	11	59	14	8.1	.9	224	0	14	15	--
JULY												
10...	1525	35	13	55	14	8.1	1.0	215	0	16	18	--
SEP.												
09...	1500	165	13	58	14	8.8	1.6	227	0	12	15	--
NOV.												
19...	1330	--	11	60	15	7.7	1.3	240	0	11	13	--
JAN., 1975												
14...	1230	--	11	59	13	7.4	.8	228	0	14	15	.1
MAR.												
19...	1115	--	9.3	57	14	7.7	.9	230	0	13	14	.1
MAY												
20...	1230	--	10	54	13	7.7	.8	224	0	12	13	.1
JULY												
29...	1010	--	13	61	15	7.7	1.1	242	0	13	12	.1
SEP.												
17...	1110	--	12	58	14	8.1	1.0	236	0	10	14	.1

DATE	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
MAY , 1968												
29...	--	--	--	--	--	--	--	--	--	176	28	--
JULY												
03...	--	--	--	--	--	--	--	--	--	194	27	--
AUG.												
08...	--	--	--	--	--	--	--	--	--	192	25	--
FEB., 1970												
02...	--	--	.00	--	--	.00	--	--	--	200	25	.3
AUG., 1971												
26...	--	--	--	--	--	--	--	--	--	--	--	--
JAN., 1974												
22...	3.1	.00	.01	.19	--	.00	249	0	0	220	45	.3
MAR.												
12...	2.4	.00	.06	.05	.11	.04	241	0	0	210	27	.3
MAY												
15...	2.2	.00	.12	.12	.24	.01	233	0	0	210	22	.2
JULY												
10...	1.7	.00	.04	.15	.19	.00	231	4	0	200	19	.3
SEP.												
09...	1.6	.00	.08	.34	.42	.02	234	0	0	200	16	.3
NOV.												
19...	.83	.00	.02	.45	.47	.00	237	1	0	210	15	.2
JAN., 1975												
14...	1.7	.01	.01	.22	.23	.02	233	0	0	200	14	.2
MAR.												
19...	2.5	.02	.01	.06	.07	.01	229	1	1	200	11	.2
MAY												
20...	1.6	.00	.00	.19	.19	.01	222	0	0	190	5	.2
JULY												
29...	.87	.01	.00	.06	.06	.00	243	1	0	210	16	.2
SEP.												
17...	1.2	.01	.03	.11	.14	.00	234	1	0	200	9	.2

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 10 (08190000), Nueces River at Laguna, Texas--Continued

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (00680)
MAY , 1968												
29...	357	7.5	28.0	--	--	--	--	--	--	--	--	--
JULY												
03...	398	7.4	27.0	--	--	--	--	--	--	--	--	--
AUG.												
08...	394	7.5	31.0	--	--	--	--	--	--	--	--	--
FEB., 1970												
02...	415	7.5	14.0	--	--	--	--	.1	28	0	0	--
AUG., 1971												
26...	468	8.0	20.5	--	--	--	--	--	--	--	--	--
JAN., 1974												
22...	454	7.8	17.0	0	0	9.1	94	.1	90	4	8	.0
MAR.												
12...	449	7.8	21.0	0	1	9.0	100	.3	18	1	10	.0
MAY												
15...	426	7.6	24.0	0	0	7.1	84	.2	64	7	38	5.0
JULY												
17...	415	8.0	27.0	0	0	9.2	114	.0	4	0	0	4.9
SEP.												
09...	405	7.7	26.0	0	0	8.6	105	.4	40	0	0	1.2
NOV.												
19...	427	7.8	21.0	0	0	9.4	104	.9	6	2	8	3.7
JAN., 1975												
14...	422	7.6	13.0	0	0	10.2	96	3.0	8	4	4	13
MAR.												
19...	415	7.6	17.0	0	0	9.4	97	.1	1	0	10	1.3
MAY												
20...	397	7.6	23.0	0	0	9.0	103	.1	50	46	120	1.2
JULY												
29...	427	7.3	25.5	0	1	7.8	94	.1	30	13	38	3.1
SEP.												
17...	428	7.8	25.0	0	0	8.0	95	.3	16	4	23	4.3

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	
JAN.. 1974									
22...	0915	40	1	60	0	0	0	7	
MAY									
15...	0930	0	1	60	0	0	0	1	
JULY									
10...	1525	10	0	70	0	0	0	1	
JAN.. 1975									
14...	1230	0	0	50	0	0	1	1	
DATE		DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN.. 1974									
22...	80	6	0	0	.0	46	--	120	
MAY									
15...	10	1	0	50	.0	0	250	0	
JULY									
10...	20	2	0	0	.0	0	260	10	
JAN.. 1975									
14...	0	1	10	0	.0	6	240	10	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 10 (08190000), Nueces River at Laguna, Texas--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALORIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL UI- ELURIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
AUG., 1971											
26...	1235	599	20.5	.00	.00	.00	.00	.00	.00	.00	.00
JAN., 1974											
22...	0915	184	17.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY											
15...	0930	178	24.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP.											
09...	1500	165	26.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AUG., 1971										
26...	.00	.0	<.5	.00	.00	.00	.00	.00	.00	.00
JAN., 1974										
22...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY										
15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP.										
09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

Site 11 (08196000), Dry Frio River near Reagan Wells, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
NOV., 1967												
03...	1545	--	8.0	58	13	7.1	--	202	0	18	13	.2
MAY, 1968												
28...	1500	--	--	60	13	--	--	228	0	--	15	--
AUG.												
07...	1508	--	--	--	--	--	--	212	0	--	14	--
FEB., 1970												
04...	1600	22	--	65	13	8.9	.6	224	0	20	15	--
JAN., 1974												
22...	1030	27	9.0	66	13	11	.8	222	0	16	17	--
MAR.												
12...	1430	21	9.0	59	13	8.3	.9	204	0	17	16	--
MAY												
15...	1035	37	9.6	59	13	8.9	.7	218	0	16	12	--
JULY												
10...	1430	12	12	54	12	7.4	.8	207	0	19	16	--
SEP.												
10...	0850	31	11	68	13	7.2	1.3	243	0	13	12	--
NOV.												
19...	1150	--	8.8	63	14	6.3	.8	232	0	13	12	--
JAN., 1975												
14...	1020	--	8.8	59	12	6.0	.6	224	0	16	12	.1

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 11 (08196000), Dry Frio River near Reagan Wells, Texas--Continued

DATE	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL- NON- FILT- RABLE RESIDUE (MG/L) (00525)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
NOV.. 1967												
03...	--	--	--	--	--	--	229	--	--	198	32	.2
MAY , 1968												
28...	--	--	--	--	--	--	--	--	--	203	16	.1
AUG.												
07...	--	--	--	--	--	--	--	--	--	202	28	--
FEB.. 1970												
04...	--	--	.00	--	--	.00	--	--	--	220	32	.3
JAN.. 1974												
22...	2.9	.00	.34	.39	--	.00	243	0	0	220	37	.3
MAR.												
12...	2.0	.00	.07	.06	.13	.03	224	0	0	200	34	.3
MAY												
15...	1.7	.01	.00	.06	.06	.01	225	0	0	200	23	.2
JULY												
10...	.67	.00	.04	.18	.22	.00	224	1	0	180	15	.2
SEP.												
10...	1.6	.00	.07	.12	.19	.01	245	0	0	220	24	.2
NOV.												
19...	1.4	.01	.02	.75	.77	.01	232	1	1	220	25	.2
JAN.. 1975												
14...	1.7	.01	.01	.21	.22	.03	225	0	0	200	13	.2
DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
NOV.. 1967												
03...	405	7.4	18.0	--	--	--	--	--	--	--	--	--
MAY , 1968												
28...	436	7.7	26.0	--	--	--	--	--	--	--	--	--
AUG.												
07...	410	7.5	31.0	--	--	--	--	--	--	--	--	--
FEB.. 1970												
04...	438	8.0	13.0	--	--	--	--	.1	32	0	14	--
JAN.. 1974												
22...	441	7.6	17.0	0	0	8.8	91	.1	180	36	44	.0
MAR.												
12...	410	7.9	22.0	0	2	8.2	93	.5	160	53	40	.0
MAY												
15...	405	7.5	25.0	0	0	7.0	83	.1	112	21	78	4.5
JULY												
10...	410	7.9	28.0	0	0	8.6	109	.1	170	4	56	3.7
SEP.												
10...	419	7.2	23.0	0	0	6.8	78	.1	600	12	68	3.9
NOV.												
19...	418	7.9	19.0	0	0	9.6	102	.3	49	14	31	2.2
JAN.. 1975												
14...	420	7.6	10.0	0	0	11.2	99	.3	33	5	22	16

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 11 (08196000), Dry Frio River near Reagan Wells, Texas--Continued

		DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)			
DATE	TIME										
JAN., 1974											
22...	1030	0	0	--	0	0	0	2			
MAY											
15...	1035	0	1	50	0	0	0	0			
JULY											
10...	1430	10	1	70	<1	0	0	3			
JAN., 1975											
14...	1020	0	0	40	0	0	1	2			
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)		
JAN., 1974											
22...	10	3	0	0	0	4	390	20			
MAY											
15...	40	0	0	20	0	0	400	10			
JULY											
10...	20	2	0	0	0	0	390	10			
JAN., 1975											
14...	0	2	0	0	0	2	360	20			
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
JAN., 1974											
22...	1030	27	17.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY											
15...	1035	37	25.0	.00	.00	.00	.00	.00	.00	.00	.00
SEP.											
10...	0850	31	23.0	.00	.00	.00	.00	.00	.00	.00	.00
DATE	TIME	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
JAN., 1974											
22...		.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY											
15...		.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP.											
10...		.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 12 (08198000), Sabinal River near Sabinal, Texas

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	DIS-	
		TANEUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SIO2) (MG/L) (00955)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)			SOLVED SULFATE (SO4) (MG/L) (00945)	SOLVED CHLO- RIDE (CL) (MG/L) (00940)		SOLVED FLUO- RIDE (F) (MG/L) (00950)
OCT., 1967													
02...	1230	--	11	62	14	7.5	1.2	203	0	31	15	.1	
MAY, 1968													
11...	1810	--	--	--	--	--	--	--	--	6.4	3.5	--	
JUNE													
28...	--	--	--	--	--	--	--	200	0	--	17	--	
AUG.													
05...	1250	--	--	--	--	--	--	220	0	--	17	--	
FEB., 1970													
04...	1700	47	--	65	14	7.4	1.0	216	0	32	14	--	
AUG., 1971													
27...	1110	232	--	--	--	--	--	254	0	24	16	--	
APR., 1973													
10...	1230	40	--	73	14	--	--	238	0	30	13	--	
JAN., 1974													
21...	1530	58	11	74	13	8.8	1.1	230	0	27	18	--	
MAR.													
12...	1300	36	12	68	14	9.0	1.8	231	0	27	17	--	
MAY													
15...	1230	66	12	72	13	7.8	1.2	252	0	24	13	--	
JULY													
10...	1250	18	14	61	13	8.7	1.2	223	0	29	18	--	
SEP.													
09...	1300	60	14	72	12	8.8	1.6	254	0	20	16	--	
NOV.													
19...	0910	--	12	74	14	8.5	1.3	256	0	28	15	--	
JAN., 1975													
14...	0800	--	13	78	13	7.7	1.0	264	0	28	15	.2	
DATE		TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
OCT., 1967													
02...	--	--	--	--	--	--	--	248	--	--	212	45	.2
MAY, 1968													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUNE													
28...	--	--	--	--	--	--	--	--	--	--	206	42	--
AUG.													
05...	--	--	--	--	--	--	--	--	--	--	223	43	--
FEB., 1970													
04...	--	--	--	.00	--	--	.01	--	--	--	220	43	.2
AUG., 1971													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR., 1973													
10...	--	--	--	.02	--	--	.01	--	--	--	240	45	--
JAN., 1974													
21...	2.5	.00	.06	.00	--	.00	.00	267	0	0	240	50	.2
MAR.													
12...	1.7	.01	.07	.07	.14	.04	.04	263	0	0	230	38	.3
MAY													
15...	1.3	.01	.09	.01	.10	.01	.01	268	0	0	230	27	.2
JULY													
10...	1.0	.00	.01	.15	.16	.00	.00	255	1	0	210	23	.3
SEP.													
09...	1.5	.00	.10	.44	.54	.02	.02	270	1	1	230	21	.3
NOV.													
19...	.18	.26	.07	.43	.50	.00	.00	279	1	1	240	32	.2
JAN., 1975													
14...	1.4	.01	.01	.14	.15	.20	.20	286	0	0	250	32	.2

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 12 (08190000), Sabinal River near Sabinal, Texas--Continued

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (00680)
OCT., 1967												
02...	426	7.5	22.0	--	--	--	--	--	--	--	--	--
MAY, 1968												
11...	263	--	18.0	--	--	--	--	--	--	--	--	--
JUNE												
28...	424	7.4	26.0	--	--	--	--	--	--	--	--	--
AUG.												
05...	452	7.5	31.0	--	--	--	--	--	--	--	--	--
FEB., 1970												
04...	468	7.7	11.5	--	--	--	--	.2	40	0	26	--
AUG., 1971												
27...	497	7.7	--	--	--	--	--	--	--	--	--	--
APR., 1973												
10...	475	8.0	16.0	--	--	9.3	93	--	1200	1	10	--
JAN., 1974												
21...	468	7.9	17.5	0	3	11.0	115	.3	110	8	12	.5
MAR.												
12...	470	7.7	20.5	0	2	8.6	95	.5	88	44	56	.0
MAY												
15...	468	7.7	25.5	0	2	8.0	96	.4	72	11	59	8.0
JULY												
10...	445	7.7	27.5	0	0	7.9	99	.0	48	12	4	1.6
SEP.												
09...	460	7.6	23.0	0	0	7.9	91	.7	120	28	13	1.7
NOV.												
19...	487	7.7	17.5	0	0	9.0	94	.4	22	4	13	1.3
JAN., 1975												
14...	504	7.8	8.0	0	0	10.6	89	.3	290	260	52	1.5

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	
JAN., 1974									
21...	1530	10	1	50	0	0	0	3	
MAY									
15...	1230	0	1	50	0	0	0	0	
JULY									
10...	1250	0	1	70	<1	0	0	1	
JAN., 1975									
14...	0800	0	0	50	1	0	0	2	
DATE		DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
JAN., 1974									
21...	10	3	0	0	.0	1	330	20	
MAY									
15...	10	0	0	30	.0	2	360	10	
JULY									
10...	20	4	0	0	.0	0	350	10	
JAN., 1975									
14...	10	2	10	0	.0	6	380	20	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 12 (08198000), Sabinal River near Sabinal, Texas--Continued

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
AUG., 1971											
27...	1110	232	--	.00	.00	.00	.00	.00	.00	.00	.00
JAN., 1974											
21...	1530	58	17.5	.00	.00	.00	.00	.00	.00	.00	.00
MAY											
15...	1230	66	25.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP.											
09...	1300	60	23.0	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AUG., 1971										
27...	.00	.0	<.5	.00	.00	.00	.00	.00	.00	.00
JAN., 1974										
21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY										
15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP.										
09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 13 (08201500), Seco Creek at Miller Ranch near Utopia, Texas

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	
MAR., 1970													
23...	1430	18	10	64	12	6.9	1.0	198	0	39	13	.2	
APR., 1973													
10...	1545	10	--	67	13	--	--	182	0	51	15	--	
JAN., 1974													
21...	1435	7.4	12	67	12	6.0	1.1	186	0	44	18	--	
MAR.													
12...	1200	4.5	11	62	12	9.2	1.2	178	0	46	16	--	
MAY													
15...	1500	20	12	67	11	7.5	1.3	216	0	41	12	--	
JULY													
10...	1200	3.1	14	57	11	8.8	1.3	176	0	47	18	--	
SEP.													
09...	1200	15	13	63	12	7.7	1.6	187	0	44	12	--	
NOV.													
18...	1520	--	12	73	13	7.3	1.0	224	0	41	12	--	
JAN., 1975													
13...	1540	--	12	79	12	7.1	.8	244	0	41	13	.2	
DATE		TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTIT- UENTS) (MG/L) (00301)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
MAR., 1970													
23...	--	--	.00	--	--	.02	244	--	--	210	47	.2	
APR., 1973													
10...	--	--	.00	--	--	.00	--	--	--	220	72	--	
JAN., 1974													
21...	1.5	.00	.00	.00	--	.00	252	0	0	220	65	.2	
MAR.													
12...	.86	.00	.08	.13	.21	.03	245	0	0	200	58	.3	
MAY													
15...	1.2	.01	.14	.00	.12	.05	259	2	0	210	36	.2	
JULY													
10...	.72	.00	.08	.42	.50	.00	244	7	0	190	44	.3	
SEP.													
09...	.96	.00	.13	.32	.45	.01	246	0	0	210	53	.2	
NOV.													
18...	.03	.00	.04	.31	.35	.02	270	1	1	240	52	.2	
JAN., 1975													
13...	1.1	.01	.00	.09	.09	.01	296	0	0	250	47	.2	
DATE		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
MAR., 1970													
23...	429	7.5	20.5	--	--	--	--	.2	440	6	10	--	
APR., 1973													
10...	449	8.2	18.0	--	--	9.8	103	--	300	0	120	--	
JAN., 1974													
21...	438	8.0	17.5	0	0	10.2	106	.0	72	28	0	.0	
MAR.													
12...	429	7.9	22.0	0	2	10.0	114	.4	840	150	62	.0	
MAY													
15...	439	8.3	30.0	0	2	8.2	108	.2	160	108	32	5.5	
JULY													
10...	410	8.2	29.0	0	0	9.5	122	.2	2500	120	84	3.1	
SEP.													
09...	396	7.8	23.0	0	0	9.0	103	.5	560	232	32	2.6	
NOV.													
18...	463	7.9	18.0	0	0	9.6	101	.1	51	12	34	1.2	
JAN., 1975													
13...	496	7.4	10.5	0	0	11.0	98	.4	9	3	12	1.2	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 13 (08201500), Seco Creek at Miller Ranch near Utopia, Texas--Continued

		DIS-SOLVED ALUMINUM (AL) (UG/L) (01106)	DIS-SOLVED ARSENIC (AS) (UG/L) (01000)	DIS-SOLVED BORON (B) (UG/L) (01020)	DIS-SOLVED CADMIUM (CD) (UG/L) (01025)	DIS-SOLVED CHROMIUM (CR) (UG/L) (01030)	DIS-SOLVED COBALT (CO) (UG/L) (01035)	DIS-SOLVED COPPER (CU) (UG/L) (01040)				
	DATE	TIME										
	JAN., 1974											
	21...	1435	0	2	60	0	0	1				
	MAY											
	15...	1500	0	0	50	0	0	0				
	JULY											
	10...	1200	10	1	70	<1	0	4				
	JAN., 1975											
	13...	1540	0	0	50	0	0	1				
				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)				
	DATE	TIME	DIS-SOLVED IRON (FE) (UG/L) (01046)	DIS-SOLVED LEAD (PB) (UG/L) (01049)	DIS-SOLVED LITHIUM (LI) (UG/L) (01130)	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)		
	JAN., 1974											
	21...	10	3	0	13	.0	1	420	20			
	MAY											
	15...	40	0	0	20	.0	1	400	10			
	JULY											
	10...	30	3	0	0	.0	0	380	10			
	JAN., 1975											
	13...	10	2	0	0	.0	2	480	20			
			INSTANTANEOUS DIS-CHARGE (CFS) (00061)	TEMPERATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI-ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTACHLOR (UG/L) (39410)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)
	JAN., 1974											
	21...	1435	7.4	17.5	.00	.00	.00	.00	.00	.00	.00	
	MAY											
	15...	1500	20	30.0	.00	.00	.00	.00	.00	.00	.00	
	SEP.											
	09...	1200	15	23.0	.00	.00	.00	.00	.00	.00	.00	
			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)	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)
	JAN., 1974											
	21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	
	MAY											
	15...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	
	SEP.											
	09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 14 (08200000), Hondo Creek near Tarpley, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
DEC., 1967												
07...	--	--	10	56	11	8.3	--	164	0	39	14	.2
FEB., 1968												
15...	1513	--	--	57	11	--	--	163	0	--	16	--
FEB., 1970												
05...	--	17	--	72	11	8.8	.8	218	0	40	13	--
AUG., 1971												
27...	1435	36	--	--	--	--	--	184	0	27	18	--
APR., 1973												
12...	0945	23	--	73	12	--	--	216	0	37	13	--
JAN., 1974												
21...	1320	18	12	77	11	11	1.2	234	0	36	19	--
MAR.												
12...	1015	12	11	68	12	10	1.5	215	0	43	16	--
MAY												
14...	1430	116	12	75	10	7.2	1.1	264	0	23	11	--
JULY												
10...	1115	15	15	68	13	11	1.2	235	0	37	18	--
SEP.												
09...	1115	46	12	66	10	8.0	1.6	218	0	28	12	--
NOV.												
18...	1344	--	11	67	11	6.6	1.2	224	0	29	10	--
JAN., 1975												
13...	1430	--	11	75	9.7	6.7	1.1	252	0	30	12	.2

DATE	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	TOTAL NON- FIL- TABLE RESIDUE (MG/L) (00530)	VOL. NON- FIL- TABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)
DEC., 1967												
07...	--	--	--	--	--	--	229	--	--	185	50	.3
FEB., 1968												
15...	--	--	--	--	--	--	--	--	--	187	53	--
FEB., 1970												
05...	--	--	.02	--	--	.00	--	--	--	230	46	.3
AUG., 1971												
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR., 1973												
12...	--	--	.00	--	--	.00	--	--	--	230	55	--
JAN., 1974												
21...	1.8	.00	.00	.00	--	.00	283	0	0	240	46	.3
MAR.												
12...	.86	.01	.11	.17	.28	.03	268	0	0	220	43	.3
MAY												
14...	1.1	.00	.04	.18	.22	.01	270	1	0	230	12	.2
JULY												
10...	1.0	.00	.04	.02	.06	.00	280	6	3	220	31	.3
SEP.												
09...	.71	.00	.06	.02	.08	.01	245	0	0	210	27	.2
NOV.												
18...	.58	.01	.04	.38	.42	.01	246	1	1	210	29	.2
JAN., 1975												
13...	.84	.01	.00	.00	.00	.02	270	0	0	230	21	.2

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
DEC., 1967												
07...	392	7.5	--	--	--	--	--	--	--	--	--	--
FEB., 1968												
15...	393	7.6	16.0	--	--	--	--	--	--	--	--	--
FEB., 1970												
05...	467	7.7	10.0	--	--	--	--	.1	110	12	130	--
AUG., 1971												
27...	419	7.7	22.0	--	--	--	--	--	--	--	--	--
APR., 1973												
12...	462	7.9	16.0	--	--	9.6	96	--	4900	25	160	--
JAN., 1974												
21...	500	7.6	16.0	0	1	11.0	110	.1	140	20	20	.0
MAR.												
12...	469	7.7	21.0	0	2	8.5	94	.8	1000	150	210	.0
MAY												
14...	455	7.6	25.5	0	1	8.0	96	.5	84	16	105	5.0
JULY												
10...	460	7.9	27.0	0	0	8.3	102	.1	84	32	36	--
SEP.												
09...	407	7.7	21.5	0	0	8.2	92	.7	156	80	80	2.4
NOV.												
18...	428	7.9	16.0	0	0	9.6	96	.4	22	7	31	1.8
JAN., 1975												
13...	477	7.4	9.5	0	1	11.4	100	.3	40	9	22	1.5

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 14 (08200000), Hondo Creek near Tarpley, Texas--Continued

		DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)				
	DATE	TIME										
	JAN.. 1974											
	21...	1320	10	0	70	0	0	4				
	MAY											
	14...	1430	0	0	50	0	0	1				
	JULY											
	10...	1115	10	1	80	<1	0	3				
	JAN.. 1975											
	13...	1430	0	0	50	0	0	2				
	DATE	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)			
	JAN.. 1974											
	21...	30	4	0	0	.0	3	430	20			
	MAY											
	14...	20	0	0	40	.0	11	350	10			
	JULY											
	10...	20	2	0	0	.0	0	430	10			
	JAN.. 1975											
	13...	10	2	10	0	.0	2	350	30			
	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
	AUG.. 1971											
	27...	1435	36	22.0	.00	.00	.00	.00	.00	.00	.00	.00
	JAN.. 1974											
	21...	1320	18	16.0	.00	.00	.00	.00	.00	.00	.00	.00
	MAY											
	14...	1430	116	25.5	.00	.00	.00	.00	.00	.00	.00	.00
	SEP.											
	09...	1115	46	21.5	.00	.00	.00	.00	.00	.00	.00	.00
	DATE	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)	
	AUG.. 1971											
	27...	.00	.0	<.5	.00	.00	.00	.00	.03	.00	.00	.00
	JAN.. 1974											
	21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00
	MAY											
	14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00
	SEP.											
	09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 15, Middle Verde Creek at Highway 689, 16.6 miles north of Hondo, Texas

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	DIS-
		TANE- OUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SI02) (MG/L) (00955)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)			SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SOLVED FLUO- RIDE (F) (MG/L) (00950)	
MAR. 23, 1970	1120	20	8.6	68	14	8.0	.8	228	0	34	15	.2
APR. 12, 1973	1230	17	--	64	15	--	--	212	0	34	13	--
		DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)		
		MAR. 23, 1970	1.0	.00	.00	265	230	--	469	7.6		
		APR. 12, 1973	.7	.02	.00	--	220	48	450	8.3		
		DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)		
MAR. 23, 1970	16.0	--	--	.2	900	13	39	--				
APR. 12, 1973	16.5	9.8	100	--	7900	44	85	--				

Site 16, Verde Creek at Highway 689, 4.6 miles north of Hondo, Texas

Site 16, Verde Creek at Highway 669, 4.6 miles north of Honda, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
AUG. 27, 1971	1510	50	172	0	25	20	--	--	--	--	190	--
DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	
AUG. 27, 1971	389		7.6	22.0	--	--	--	--	--	--	--	
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL OI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)	
AUG. 27, 1971	1510	50	22.0	.00	.00	.00	.00	.00	.00	.00	.00	
DATE	TIME	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)	
AUG. 27, 1971		.00	.00	5.0	.00	.00	.00	.00	.00	.00	.01	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 17 (08179000), Medina River near Pipe Creek, Texas

DATE	TIME	INSTANTANEOUS	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAN-	
		DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SI02) (MG/L) (00955)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)			
APR., 1971											
28...	0930	20	10	85	23	--	11	--	228	0	
AUG.											
30...	1121	446	--	--	--	--	--	--	238	0	
APR., 1972											
11...	1530	64	9.8	82	20	--	8.5	--	228	0	
APR., 1973											
12...	1420	124	--	82	20	--	--	--	232	0	
JAN., 1974											
21...	1215	122	11	85	21	10	--	1.5	263	0	
MAR.											
11...	1400	100	9.9	79	21	13	--	1.5	242	0	
MAY											
14...	1300	220	12	78	17	8.3	--	1.4	276	0	
JULY											
10...	1020	70	13	77	21	10	--	1.9	238	0	
SEP.											
09...	1015	175	13	80	17	9.7	--	2.1	249	0	
NOV.											
18...	1145	--	11	84	21	8.9	--	1.6	248	0	
JAN., 1975											
13...	1300	--	12	88	19	11	--	1.4	286	0	
DATE		DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
APR., 1971											
28...	120	15	.3	--	--	--	.00	--	--	.05	--
AUG.											
30...	62	17	--	--	--	--	--	--	--	--	--
APR., 1972											
11...	84	19	.3	--	--	--	.00	--	--	.00	--
APR., 1973											
12...	77	15	--	--	--	--	.01	--	--	.01	--
JAN., 1974											
21...	69	19	--	1.5	.00	.03	.15	--	.00	.00	347
MAR.											
11...	68	17	--	.99	.01	.13	.22	.35	.05	.05	329
MAY											
14...	51	13	--	1.0	.00	.10	.04	.14	.07	.07	318
JULY											
10...	78	20	--	.75	.00	.04	.23	.27	.00	.00	334
SEP.											
09...	60	15	--	.12	.00	.05	.11	.16	.02	.02	319
NOV.											
18...	56	15	--	1.7	.01	.04	.42	.46	.04	.04	330
JAN., 1975											
13...	66	15	.3	1.1	.01	.01	.21	.22	.03	.03	355
DATE		TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAN- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	
APR., 1971											
28...	--	--	--	310	120	--	596	7.7	21.0	--	
AUG.											
30...	--	--	--	--	--	--	543	7.6	--	--	
APR., 1972											
11...	--	--	--	290	100	--	589	7.6	24.0	--	
APR., 1973											
12...	--	--	--	290	97	--	562	8.0	16.0	--	
JAN., 1974											
21...	0	0	0	300	84	.3	584	7.7	15.0	0	
MAR.											
11...	0	0	0	280	85	.3	574	7.7	21.0	5	
MAY											
14...	10	2	2	270	39	.2	528	7.7	23.5	0	
JULY											
10...	7	6	6	270	72	.3	550	7.6	25.5	0	
SEP.											
09...	3	1	1	270	66	.3	524	7.3	22.5	3	
NOV.											
18...	1	0	0	300	76	.2	572	7.7	17.0	0	
JAN., 1975											
13...	1	0	0	300	64	.3	587	7.1	10.0	0	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 17 (08179000), Medina River near Pipe Creek, Texas--Continued

DATE	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	10- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38266)
APR.. 1971									
28...	--	--	--	1.6	31000	130	310	--	.0
AUG.									
30...	--	--	--	--	--	--	--	--	--
APR.. 1972									
11...	--	--	--	--	16000	7	200	--	.0
APR.. 1973									
12...	--	9.3	93	--	12000	27	200	--	--
JAN.. 1974									
21...	0	10.8	106	.2	56	12	12	1.0	--
MAR.									
11...	5	8.4	93	.9	260	48	22	.0	--
MAY									
14...	10	7.4	86	.6	890	140	220	4.0	--
JULY									
17...	0	7.4	89	.4	260	28	100	2.1	--
SEP.									
19...	4	7.5	85	.8	2500	184	196	3.3	--
NOV.									
18...	1	9.2	95	6.0	670	160	170	4.5	--
JAN.. 1975									
13...	1	10.8	96	.5	47	40	130	2.8	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED MORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)
APR.. 1971								
28...	0930	--	0	--	--	--	--	2
APR.. 1972								
11...	1530	--	0	70	--	--	--	2
JAN.. 1974								
21...	1215	10	2	70	0	0	0	3
MAY								
14...	1300	0	0	60	0	0	0	2
JULY								
10...	1020	0	1	90	0	0	0	3
JAN.. 1975								
13...	1300	0	0	80	0	0	0	2

DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
APR.. 1971									
28...	--	0	--	--	<.5	--	--	20	
APR.. 1972									
11...	--	0	--	--	.2	--	--	40	
JAN.. 1974									
21...	10	4	0	0	.0	3	1100	20	
MAY									
14...	20	0	0	10	.0	4	820	10	
JULY									
10...	20	1	0	0	.0	2	1200	10	
JAN.. 1975									
13...	10	2	10	0	.0	5	940	10	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDO (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
AUG.. 1971											
30...	1121	446	--	.00	.00	.00	.00	.00	.00	.00	.00
JAN.. 1974											
21...	1215	122	15.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY											
14...	1300	220	23.5	.00	.00	.00	.00	.00	.00	.00	.00
SEP.											
09...	1015	175	22.5	.00	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
AUG.. 1971										
30...	.00	.0	<.5	.00	.00	.00	.00	.00	.00	.00
JAN.. 1974										
21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
MAY										
14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00
SEP.										
09...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 18, Medina Lake at mouth of Plum Creek and Hamilton Coves

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
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APR.
28, 1971 1130 -- -- 56 19 -- -- 176 0 67 15 --

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
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APR.
28, 1971 .01 .00 .00 -- 220 -- 447 7.7

DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL. ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
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APR.
28, 1971 -- -- -- -- 65 0 0 -- .01

Site 19, Medina Lake at Plum Creek Cove

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
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APR.
28, 1971 1150 -- -- -- -- -- .10 .00 .00 -- -- --

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL. ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
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APR.
28, 1971 446 -- -- -- -- -- 660 1 3 -- .00

Site 20, Medina Lake at Hamilton Cove

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
------	------	---	---	--	---	--	---	--	--	---	---	--

APR.
28, 1971 1205 -- -- -- -- -- .10 .00 .00 -- -- --

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL. ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
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APR.
28, 1971 445 -- -- -- -- -- 270 1 1 -- .02

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 21, Medina Lake at Angel Cove

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
APR. 28, 1971	1230	--	--	--	--	--	.10	.00	.00	--	--	--
		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
APR. 28, 1971	445	--	--	23.0	--	--	--	430	0	0	--	.10

Site 22, Medina Lake at north side of Red Cove

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
APR. 28, 1971	1500	--	--	--	--	--	.00	.00	.00	--	--	--
		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
APR. 28, 1971	443	--	--	25.0	--	--	--	240	4	4	--	.06

Site 23, Medina Lake at south side of Red Cove

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
APR. 28, 1971	1430	--	--	--	--	--	.00	.00	.00	--	--	--
		SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
APR. 28, 1971	445	--	--	--	--	--	--	200	4	4	--	.06

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 24, Medina Lake at dam

DATE	TIME	DIS- SOLVED SILICA (5102) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
FEB., 1970										
10...	1405	7.8	61	16	8.0	2.3	194	0	56	15
JULY										
10...	1225	8.8	62	16	8.0	1.9	198	0	56	16
FEB., 1971										
26...	1125	8.1	61	18	8.0	2.1	186	0	64	15
APR.										
28...	1445	--	--	--	--	--	--	--	--	--
JULY										
21...	1055	7.5	51	18	7.5	2.4	160	0	61	15
OCT.										
21...	1310	8.1	52	12	5.6	2.2	170	0	35	11
FEB., 1974										
26...	1126	10	.68	15	8.0	1.9	222	0	41	13
MAR.										
13...	1130	9.9	52	15	7.9	1.9	176	0	42	15
SEP.										
17...	1430	10	47	14	7.9	1.7	170	0	35	14
DEC.										
11...	1440	11	56	15	7.3	2.5	176	0	43	15

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
------	---	--	--	--	--	---	--	--	---

FEB., 1970									
10...	.2	.60	--	--	264	218	59	.2	452
JULY									
10...	.2	.40	--	--	268	220	58	.2	460
FEB., 1971									
26...	.3	.20	--	--	268	230	74	.2	463
APR.									
28...	--	--	.00	.00	--	--	--	--	444
JULY									
21...	.3	.00	--	--	242	200	70	.2	421
OCT.									
21...	.1	.40	--	--	212	180	40	.2	368
FEB., 1974									
26...	--	--	--	--	266	230	49	.2	462
MAR.									
13...	.2	--	.06	.01	231	190	47	.2	452
SEP.									
17...	--	--	--	--	213	180	36	.3	354
DEC.									
11...	.2	--	--	--	237	200	57	.2	427

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)
------	--------------------------	--	---	---	---	--	--	--	---

FEB., 1970									
10...	7.5	16.0	--	--	--	--	--	--	--
JULY									
10...	7.5	16.5	--	--	--	--	--	--	--
FEB., 1971									
26...	7.5	14.0	0	--	--	--	--	--	--
APR.									
28...	--	--	--	--	55	1	0	--	.0
JULY									
21...	8.0	23.0	--	--	--	--	--	--	--
OCT.									
21...	7.7	23.0	--	--	--	--	--	--	--
FEB., 1974									
26...	8.1	23.5	--	--	--	--	--	--	--
MAR.									
13...	7.9	18.5	--	.7	23	0	1	1.0	--
SEP.									
17...	8.1	25.0	--	--	--	--	--	--	--
DEC.									
11...	8.0	15.0	--	--	--	--	--	--	--

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 24, Medina Lake at dam--Continued

DATE	TIME	DIS- SOLVED MOLYB- (B) (UG/L) (01020)	DIS- SOLVED IRON (FE) (UG/L) (01046)
JULY, 1970			
10...	1225	50	0
FEB., 1971			
26...	1125	50	--
JULY			
21...	1055	45	--
OCT.			
21...	1310	60	--
FEB., 1974			
26...	1126	40	--

Site 25, Medina River at county road crossing, 0.8 mile south of Medina Dam

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
FEB. 02, 1970	--	--	--	60	16	10	1.9	192	0	58	14	--
DATE		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)			
FEB. 02, 1970		.70	.00	.00	--	220	--	449	7.8			
DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)				
FEB. 02, 1970	14.0	--	--	.0	2100	4	150	--				

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 26 (08180500), Medina River near Riomedina, Texas

DATE	TIME	TOTAL NITRATE (N) (00620)	TOTAL NITRITE (N) (00615)	AMMONIA NITRO- GEN (N) (00610)	TOTAL PHOS- PHORUS (P) (00665)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)
JAN., 1968											
31...	1230	--	--	--	--	450	7.5	16.0	8.6	90	.8
MAR.											
05...	1140	--	--	--	--	462	7.7	13.0	8.1	79	.5
APR.											
17...	1230	--	--	--	--	478	7.7	20.0	9.0	102	.2
MAY											
09...	0845	--	--	--	--	469	7.5	21.0	6.4	74	1.2
JUNE											
05...	0900	--	--	--	--	478	7.4	23.0	5.7	68	.8
JULY											
09...	1100	--	--	--	--	490	7.5	24.0	6.6	80	.4
24...	1000	--	--	--	--	488	7.7	25.0	6.9	85	.3
AUG.											
06...	1120	--	--	--	--	500	7.6	24.0	7.6	93	1.0
27...	1415	--	--	--	--	481	7.6	25.0	9.0	112	1.4
OCT.											
08...	1120	--	--	--	--	465	7.4	24.0	6.9	82	.4
DEC.											
05...	1345	--	--	--	--	476	8.0	16.0	11.1	113	.3
FEB., 1969											
05...	1410	--	--	--	--	467	7.8	14.0	9.0	87	.3
APR.											
10...	1540	--	--	--	--	443	7.6	22.0	8.8	100	1.5
MAY											
15...	1600	--	--	--	--	441	7.6	24.0	8.2	96	.7
JUNE											
03...	2015	--	--	--	--	451	7.3	23.0	7.0	80	.7
12...	1530	--	--	--	--	454	7.6	26.0	8.4	102	.5
JULY											
12...	1020	--	--	--	--	468	7.0	25.0	7.2	86	.7
23...	1440	--	--	--	--	459	7.3	26.0	8.2	100	.3
AUG.											
07...	1530	--	--	--	--	467	7.5	26.0	7.6	92	.4
20...	1630	--	--	--	--	467	7.2	24.0	7.1	83	.4
SEP.											
25...	1015	--	--	--	--	464	7.3	22.0	6.4	73	.4
OCT.											
22...	1500	.20	--	--	--	454	7.9	23.0	8.1	93	.6
DEC.											
10...	1200	.40	.00	.04	.30	558	7.7	15.0	8.6	84	.2
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)
FEB., 1970											
11...	1100	--	--	--	--	--	--	--	--	--	--
MAR.											
23...	1000	46	7.4	64	15	7.3	--	1.9	205	0	51
APR.											
14...	0930	--	6.6	66	16	--	6.9	--	209	0	50
MAY											
12...	0915	--	8.2	66	15	--	11	--	212	0	52
JUNE											
11...	0845	--	8.0	63	16	--	9.7	--	206	0	51
JULY											
09...	0745	--	9.0	66	16	--	8.9	--	216	0	49
23...	1430	--	8.7	62	16	--	8.0	--	200	0	52
AUG.											
06...	1045	--	9.1	64	16	--	9.7	--	206	0	53
26...	1500	--	9.3	62	16	--	14	--	210	0	54
SEP.											
09...	1000	--	9.2	64	16	--	11	--	208	0	54
22...	0940	--	9.9	64	16	--	9.6	--	208	0	53
OCT.											
09...	1200	--	8.8	16	16	--	62	--	202	0	52
DEC.											
01...	1300	--	8.3	66	16	--	7.3	--	206	0	54
FEB., 1971											
01...	0955	--	8.6	64	18	--	4.6	--	190	0	62
APR.											
05...	1100	--	7.7	62	17	--	10	--	192	0	64
MAY											
13...	1400	--	8.1	62	18	--	6.9	--	188	0	65
JUNE											
01...	1052	--	8.7	60	17	--	9.0	--	184	0	62
22...	1330	--	8.8	57	18	--	9.8	--	180	0	61
JULY											
29...	1520	--	8.8	61	17	--	9.8	--	188	0	62
AUG.											
16...	1045	--	9.6	44	6.8	--	3.3	--	134	0	21
31...	0915	--	10	61	13	--	7.3	--	196	0	39
SEP.											
09...	0938	--	9.4	60	14	--	7.1	--	192	0	42
28...	1530	--	7.8	55	14	--	9.9	--	188	0	41
NOV.											
01...	1200	--	9.2	54	11	--	6.7	--	174	0	34

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 26 (08180500), Medina River near Riomedina, Texas--Continued

DATE	OIS- SOLVED CHLORIDE (CL) (MG/L) (00940)	OIS- SOLVED FLUORIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITROGEN (N) (MG/L) (00610)	TOTAL ORGANIC NITROGEN (N) (MG/L) (00605)	TOTAL PHOSPHORUS (P) (MG/L) (00665)	OIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CARBONATE HARDNESS (MG/L) (00902)	SODIUM ADSORPTION RATIO (00931)
FEB., 1970											
11...	--	--	.40	.00	.00	--	.03	--	--	--	--
MAR.											
23...	14	.2	--	--	.00	--	.03	262	220	53	.2
APR.											
14...	14	.1	.60	.00	.00	--	.03	265	230	59	.2
MAY											
12...	14	.2	.50	.00	.00	--	.02	273	226	52	.3
JUNE											
11...	14	.2	.50	.00	.00	--	.03	265	223	54	.3
JULY											
04...	14	.2	.40	.00	.00	--	.04	271	230	53	.3
23...	13	.2	.30	.00	.00	--	--	259	220	57	.2
AUG.											
06...	15	.2	.30	.00	.00	--	.00	270	226	57	.3
26...	15	.2	.20	.00	.00	--	.00	274	220	48	.4
SEP.											
04...	14	.9	.30	.00	.00	--	.01	272	226	55	.3
22...	14	.1	.20	.00	.00	--	.01	270	226	55	.3
OCT.											
09...	15	.1	.10	.00	.06	.26	.01	269	110	0	2.6
DEC.											
01...	14	.2	.30	.00	.00	.07	.02	268	230	62	.2
FEB., 1971											
01...	16	.2	.10	.00	.00	--	.00	267	230	78	.1
APR.											
05...	15	.2	.10	.00	.00	--	.02	270	220	67	.3
MAY											
13...	15	.2	.20	.00	.00	--	.00	268	230	74	.2
JUNE											
01...	16	.2	.20	.00	.00	--	.01	264	220	69	.3
22...	18	.2	.20	.00	.00	--	.04	263	220	69	.3
JULY											
29...	17	.2	.10	.00	.00	--	.00	268	220	68	.3
AUG.											
16...	7.8	.2	.50	.00	.04	--	.01	161	140	28	.1
31...	13	.2	.40	.00	.00	--	.00	241	210	45	.2
SEP.											
09...	14	.2	.40	.00	.00	--	.04	242	210	50	.2
24...	13	.2	.20	.00	.00	--	.01	234	200	41	.3
NOV.											
01...	9.8	.2	.60	.00	.00	--	.01	214	180	37	.2

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	METHY- LENE BLUE ACTIVE SUR- STANCE (MG/L) (38260)
FEB., 1970										
11...	454	7.4	14.0	8.7	84	.1	--	--	--	--
MAR.										
23...	450	7.7	16.0	--	--	.4	7100	21	59	--
APR.										
14...	464	7.5	18.0	7.5	79	.0	--	--	--	--
MAY										
12...	465	7.3	20.5	6.5	71	.3	--	--	--	--
JUNE										
11...	464	7.4	21.5	6.3	71	.6	--	--	--	--
JULY										
09...	462	7.2	23.5	6.0	70	.2	--	--	--	--
23...	452	7.7	26.0	7.7	94	.2	--	--	--	--
AUG.										
06...	474	7.5	23.0	6.1	70	.1	--	--	--	.4
26...	465	7.7	26.0	7.1	87	.2	--	--	--	--
SEP.										
09...	469	7.7	23.0	5.9	68	.5	--	--	--	--
22...	457	7.6	23.5	5.7	66	.5	--	--	--	--
OCT.										
09...	459	7.2	19.5	6.1	66	.2	--	--	--	--
DEC.										
01...	463	7.6	18.0	8.8	93	.1	--	--	--	--
FEB., 1971										
01...	463	7.3	12.5	9.0	84	.3	--	--	--	--
APR.										
05...	462	7.8	17.0	9.4	97	.6	--	--	--	--
MAY										
13...	460	7.8	20.0	9.1	99	.3	--	--	--	--
JUNE										
01...	452	7.5	21.0	7.2	80	.4	--	--	--	--
22...	446	7.7	23.0	8.1	93	.4	--	--	--	--
JULY										
29...	461	8.0	25.0	8.7	104	.7	--	--	--	--
AUG.										
16...	277	7.3	26.0	7.1	87	1.1	--	--	--	--
31...	419	7.4	24.5	5.9	70	1.2	--	--	--	--
SEP.										
09...	419	7.5	26.0	7.8	95	.9	--	--	--	--
28...	402	7.6	26.5	8.0	98	.9	--	--	--	--
NOV.										
01...	371	7.8	23.0	8.5	98	.5	--	--	--	--

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 26 (08180500), Medina River near Riomedina, Texas--Continued

DATE	TIME	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
JAN., 1972									
03...	1145	10	65	13	--	7.0	--	210	0
MAR.									
22...	1600	8.0	62	13	--	11	--	208	0
MAY									
05...	0845	9.6	62	14	--	14	--	212	0
JULY									
13...	1540	10	68	12	--	10	--	228	0
SEP.									
18...	1725	12	61	13	6.8	--	2.1	198	0

DATE	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)
JAN., 1972									
03...	37	12	.2	.80	.00	.00	--	.02	251
MAR.									
22...	41	12	.2	.60	.00	.00	--	.02	252
MAY									
05...	43	15	.2	.80	.00	.00	--	.00	265
JULY									
13...	33	12	.2	.60	.00	.00	--	.02	260
SEP.									
18...	36	12	.2	.40	.00	.00	.00	.00	242

DATE	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)
JAN., 1972									
03...	220	44	.2	434	7.5	17.0	8.9	92	.3
MAR.									
22...	210	38	.3	437	7.8	23.0	9.8	113	1.8
MAY									
05...	210	39	.4	442	7.5	19.5	7.2	77	.6
JULY									
13...	220	32	.3	462	7.5	29.0	7.4	95	.9
SEP.									
18...	200	43	.2	413	7.3	27.0	8.0	99	.6

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 27, San Geronimo Creek, 5.6 miles south southwest of San Geronimo, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
MAR. 24, 1970	--	4.0	6.5	62	16	7.8	1.1	220	0	34	14	.1
AUG. 30, 1971	1255	6.2	--	--	--	--	--	184	0	33	15	--
DATE	TIME	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)			
MAR. 24, 1970		.70	.00	.03	253	220	--	443	7.6			
AUG. 30, 1971		--	--	--	--	200	--	396	7.7			
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)			
MAR. 24, 1970	16.5	--	--	--	.5	760	25	57	--			
AUG. 30, 1971	--	--	--	--	--	--	--	--	--			
DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)				
MAR. 24, 1970	--	0	0	--	0	0	0	0				
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)			
MAR. 24, 1970		0	0	0	0	--	--	380	10			
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DI- ELDRIN (UG/L) (39380)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)	
AUG. 30, 1971	1255	6.2	--	.00	.00	.00	.00	.00	.00	.00	.00	
DATE	TIME	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)	
AUG. 30, 1971		.00	.00	5.0	.00	.00	.00	.00	.00	.00	.00	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 28, Helotes Creek at county road crossing, 3.4 miles upstream from Highway 16

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (CO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN. 29, 1970	1300	20	--	--	--	--	--	--	--	--	--	--
FEB. 22, 1974	1245	--	--	74	20	11	1.0	288	0	20	20	.2
		DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)		
		JAN. 29, 1970	.00	.02	.20	--	--	--	529	7.6		
		FEB. 22, 1974	.12	.04	.01	--	270	31	556	7.8		
		DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)		
JAN. 29, 1970	16.0	16.0	8.9	89	.3	1600	11	51	--			
FEB. 22, 1974	14.0	14.0	11.2	108	.8	660	310	76	3.0			

Site 29, Lee Creek 0.2 mile upstream from mouth

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (MG03) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
JAN. 29, 1970	1400	.8	--	--	--	--	--	--	--	--	--	--
FEB. 22, 1974	1300	--	--	64	16	88	.6	246	0	15	18	.1
			TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)		HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH	
	DATE										(UNITS)	
JAN. 29, 1970			.00	.03	.05	--	--	--	--	444	7.7	
FEB. 22, 1974			.10	.04	.01	--		230	24	452	7.5	
				BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)				
DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)									
JAN. 29, 1970	14.0	7.7	74	.1	1200	13	48	--				
FEB. 22, 1974	13.0	10.6	100	.2	800	7	6	2.0				

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 30, Helotes Creek at county road crossing, 2.2 miles upstream from Highway 16

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	DIS-
		TANE- OUS DIS- CHARGE (CFS) (00061)	SOLVED SILICA (SIO2) (MG/L) (00955)	SOLVED CAL- CIUM (CA) (MG/L) (00915)	SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	SOLVED SODIUM (NA) (MG/L) (00930)	SOLVED PO- TAS- SIUM (K) (MG/L) (00935)			SOLVED CHLO- RIDE (CL) (MG/L) (00940)	SOLVED FLUO- RIDE (F) (MG/L) (00950)	
JAN. 29, 1970	1130	1.7	--	--	--	--	--	--	--	--	--	--
FEB. 22, 1974	1140	--	--	68	20	14	1.0	264	0	26	16	.2
		DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)		
		JAN. 29, 1970	.10	.10	.10	--	--	--	521	7.5		
		FEB. 22, 1974	.17	.05	.01	--	250	36	547	7.6		
		DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)		
JAN. 29, 1970	13.5	8.4	80	.1	2800	84	170	--				
FEB. 22, 1974	12.0	9.4	87	.3	660	86	62	2.0				

Site 31, Chimenea Creek, 100 feet upstream from mouth

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	BICAR-	CAR-	DIS-	DIS-	DIS-
		TANEUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED			SOLVED	SOLVED	SOLVED
		CHARGE	SILICA	CAL-	MAG-	SODIUM	TAS-	BONATE	BONATE	SULFATE	CHLO-	FLUO-
		(CFS)	(SI02)	CIUM	NE-	(NA)	SIUM	(HCO3)	(CO3)	(SO4)	RIDE	RIDE
		(00061)	(MG/L)	(CA)	SIUM	(MG/L)	(K)	(MG/L)	(MG/L)	(MG/L)	(CL)	(F)
			(00955)	(MG/L)	(MG)	(00930)	(00935)	(00440)	(00445)	(00945)	(00940)	(00950)
JAN. 29, 1970	1100	.4	--	--	--	--	--	--	--	--	--	--
FEB. 22, 1974	1112	--	--	72	16	9.6	1.0	260	0	20	21	.2
			TOTAL	AMMONIA	TOTAL	DIS-			NON-	SPE-		
			NITRITE	NITRO-	PHOS-	SOLVED		HARD-	CAR-	CIFIC		
			PLUS	GEN	PHOS-	SOLIDS	(SUM OF	NESS	BONATE	CON-		
			NITRATE	(N)	PHORUS	(CONSTITUENTS)	(CA+MG)	NESS	HARD-	DUCT-	PH	
		DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	ANCE	(UNITS)	
			(00630)	(00610)	(00665)	(70301)	(00900)	(00902)	(00902)	(MICRO-	(00400)	
										MMOS)		
			(00095)									
JAN. 29, 1970			.10	.20	.10	--	--	--	--	489	7.4	
FEB. 22, 1974			.23	.05	.02	--	250	32	501	7.6		
				BIO-	IMME-	FECAL	STREP-	DIS-				
				CHEM-	DIATE	COLI-	TOCOCCI	SOLVED				
				ICAL	COLI-	FORM	(COL-	ORGANIC				
				OXYGEN	(COL.	(COL.	ONIES	CARBON				
				DEMAND	PER	PER	PER	(C)				
				5 DAY	100 ML)	100 ML)	100 ML)					
				(MG/L)	(31501)	(31616)	(31679)	(00681)				
JAN. 29, 1970	12.0	8.6	80	.1	310	9	37	--				
FEB. 22, 1974	13.5	11.3	108	.2	820	180	120	.0				

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 32, Helotes Creek at county road crossing, 0.5 mile upstream from Highway 16

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
SEP. 15, 1969	1215	.3	13	62	16	84	--	236	0	24	16	.1
JAN. 29, 1970	1035	.4	3.4	68	16	13	1.1	260	0	21	21	.0
FEB. 22, 1974	1035	--	--	66	19	13	1.0	254	0	24	25	.2

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
SEP. 15, 1969	.10	.00	.03	257	220	--	441	7.8
JULY 29, 1970	.00	.07	.05	272	240	--	481	7.9
FEB. 22, 1974	.09	.07	.01	--	240	34	497	7.3

DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)
SEP. 15, 1969	27.0	--	--	.1	13000	210	4700	--
JULY 29, 1970	13.0	8.1	76	.2	4200	40	170	--
FEB. 22, 1974	12.0	9.6	89	.7	100	4	38	4.5

Site 33, Guadalupe River at second crossing, 2 miles downstream from Deep Creek

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HC03) (MG/L) (00440)	CAR- BONATE (C03) (MG/L) (00445)	DIS- SOLVED SULFATE (S04) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
MAR. 24, 1970	1330	--	8.3	52	16	8.6	2.2	216	0	17	16	.2
MAR. 14, 1974	1030	231	10	54	17	9.2	1.9	222	0	17	16	.2

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	HARD- NESS (CA+MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
MAR. 24, 1970	.40	.00	.04	228	196	19	401	7.9
MAR. 14, 1974	.30	.04	.01	--	240	34	419	8.2

DATE	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)
MAR. 24, 1970	15.0	--	--	.2	1700	5	24	--
MAR. 14, 1974	15.0	--	--	.7	270	110	13	.5

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 34 (08171000), Blanco River at Wimberly, Texas

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED SODIUM PLUS POTAS- SIUM (MG/L) (00933)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	
MAR., 1970											
24...	1420	322	6.8	71	14	7.2	--	1.0	264	0	
MAR., 1973											
08...	1500	--	--	59	15	--	9.9	--	230	0	
JAN., 1974											
21...	0900	105	9.3	71	17	8.1	--	1.2	272	0	
MAR.											
11...	0915	88	9.1	61	17	8.6	--	1.2	242	0	
MAY											
14...	0830	78	9.3	65	17	8.5	--	1.3	256	0	
JULY											
23...	1230	31	11	53	19	8.9	--	1.4	209	0	
SFP.											
26...	1130	102	11	53	19	7.3	--	1.3	240	0	
NOV.											
15...	1215	205	9.6	72	16	8.8	--	.5	274	0	
JAN., 1975											
20...	1545	175	8.6	75	17	6.1	--	.8	288	0	
DATE		DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRATE (N) (MG/L) (00620)	TOTAL NITRITE (N) (MG/L) (00615)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)
MAR., 1970											
24...	16	12	.2	--	--	.00	--	--	.03	259	
MAR., 1973											
08...	20	13	--	--	--	.00	--	--	.01	--	
JAN., 1974											
21...	21	15	--	1.1	.00	.01	.00	--	.00	277	
MAR.											
11...	23	13	--	.86	.01	.09	.15	.24	.14	252	
MAY											
14...	23	13	--	.45	.01	.02	.10	.12	.01	264	
JULY											
23...	37	16	--	.45	.00	.05	.18	.23	.01	250	
SFP.											
26...	21	12	--	.48	.00	.11	.27	.38	.03	243	
NOV.											
15...	17	18	--	.53	.01	.02	.38	.40	.02	277	
JAN., 1975											
20...	19	15	.2	.57	.00	.01	.21	.22	.00	286	
DATE		TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	COLOR (PLAT- INUM- COBALT UNITS) (00080)	
MAR., 1970											
24...	--	--		240	19	.2	468	7.9	19.0	--	
MAR., 1973											
08...	--	--		210	20	--	430	8.0	--	--	
JAN., 1974											
21...	0	0		250	27	.2	500	7.5	12.0	0	
MAR.											
11...	0	0		220	24	.3	456	7.5	21.0	2	
MAY											
14...	2	0		230	23	.2	462	7.6	24.0	0	
JULY											
23...	1	1		210	40	.3	432	7.6	30.0	0	
SFP.											
26...	19	6		210	14	.2	447	7.9	20.5	0	
NOV.											
15...	2	0		250	21	.2	509	7.4	14.5	0	
JAN., 1975											
20...	2	1		260	21	.2	492	7.8	15.0	0	

TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 34 (08171000), Blanco River at Wimberley, Texas--Continued

DATE	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	410- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L) (38260)		
MAR.. 1970											
24...	--	--	--	.2	3100	15	40	--	--		
MAR.. 1973											
08...	--	--	--	--	5000	22	48	--	.0		
JAN.. 1974											
21...	0	10.6	98	.3	90	28	48	.0	--		
MAR..											
11...	3	8.7	97	.7	80	22	43	.0	--		
MAY..											
14...	2	7.4	87	.8	440	28	83	8.0	--		
JULY..											
23...	1	8.5	112	.4	20	12	110	4.4	--		
SFP..											
26...	15	9.6	105	.8	160	73	86	--	--		
NOV..											
15...	1	9.6	93	.0	110	62	63	3.1	--		
JAN.. 1975											
20...	2	9.8	96	.5	60	22	35	--	--		
DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	DIS- SOLVED COPPER (CU) (UG/L) (01040)			
MAR.. 1970											
24...	1420	100	0	--	0	0	0	0			
JAN.. 1974											
21...	0900	10	0	60	0	0	0	2			
MAY..											
14...	0830	10	0	50	3	0	0	5			
JULY..											
23...	1230	0	0	70	0	0	0	0			
JAN.. 1975											
20...	1545	--	0	40	0	0	0	1			
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED STRON- TIUM (SR) (UG/L) (01080)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)		
MAR.. 1970											
24...	0	0	0	0	--	--	240	20			
JAN.. 1974											
21...	30	4	0	0	.0	4	420	20			
MAY..											
14...	40	4	0	30	.0	4	410	30			
JULY..											
23...	20	4	0	0	.0	0	580	10			
JAN.. 1975											
20...	10	1	0	20	.0	6	280	10			
DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	TOTAL ALDRIN (UG/L) (39330)	TOTAL DDD (UG/L) (39360)	TOTAL DDE (UG/L) (39365)	TOTAL DDT (UG/L) (39370)	TOTAL DIE- LDORIN (UG/L) (39390)	TOTAL ENDRIN (UG/L) (39390)	TOTAL HEPTA- CHLOR (UG/L) (39410)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L) (39420)
MAR.. 1970											
24...	1420	322	19.0	.00	.00	.00	.00	.00	.00	.00	.00
JAN.. 1974											
21...	0900	105	12.0	.00	.00	.00	.00	.00	.00	.00	.00
MAY..											
14...	0830	78	24.0	.00	.00	.00	.00	.00	.00	.00	.00
JAN.. 1975											
20...	1545	175	15.0	.00	.00	.00	.00	.00	.00	.00	.00
DATE	TIME	TOTAL LINDANE (UG/L) (39340)	TOTAL CHLOR- DANE (UG/L) (39350)	TOTAL PCB (UG/L) (39516)	TOTAL DI- AZINON (UG/L) (39570)	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL 2,4-D (UG/L) (39730)	TOTAL SILVEX (UG/L) (39760)	TOTAL 2,4,5-T (UG/L) (39740)
MAR.. 1970											
24...	.00	--	--	--	--	--	--	.00	.00	.00	
JAN.. 1974											
21...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	
MAY..											
14...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	
JAN.. 1975											
20...	.00	.0	.0	.00	.00	.00	.00	.00	.00	.00	

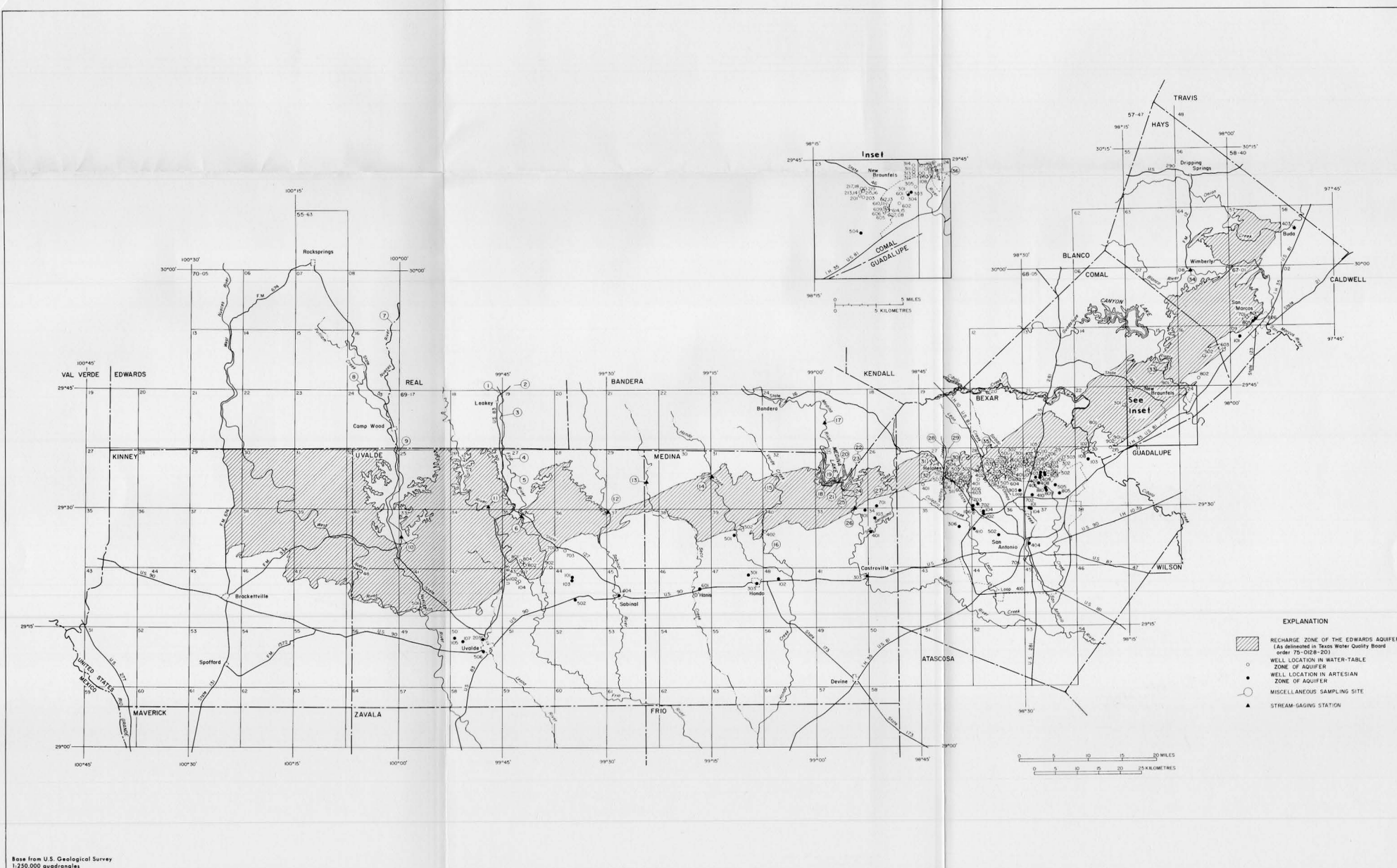
TABLE 2.--WATER-QUALITY DATA FROM SITES OTHER THAN WELLS AND SPRINGS IN THE SAN ANTONIO AREA--CONTINUED

Site 35, Leon Creek at old Camp Bullis road crossing

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
NOV. 07, 1973	1015	670	7.5	90	12	8.0	1.5	297	0	24	15	1
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	
NOV. 07, 1973		19.5	8.7	94	1	210	12	280	.00	544	7.4	
DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)
NOV. 07, 1973	--	--	--	1	--	--	--	--	--	3		
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED LEAD (Pb) (UG/L) (01049)	DIS- SOLVED LITHIUM (LI) (UG/L) (01130)	DIS- SOLVED BORON (B) (UG/L) (01020)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)	DIS- SOLVED MANG- NESE (Mn) (UG/L) (01056)
NOV. 07, 1973	--	--	0	--	--	2	--	--	--	20		

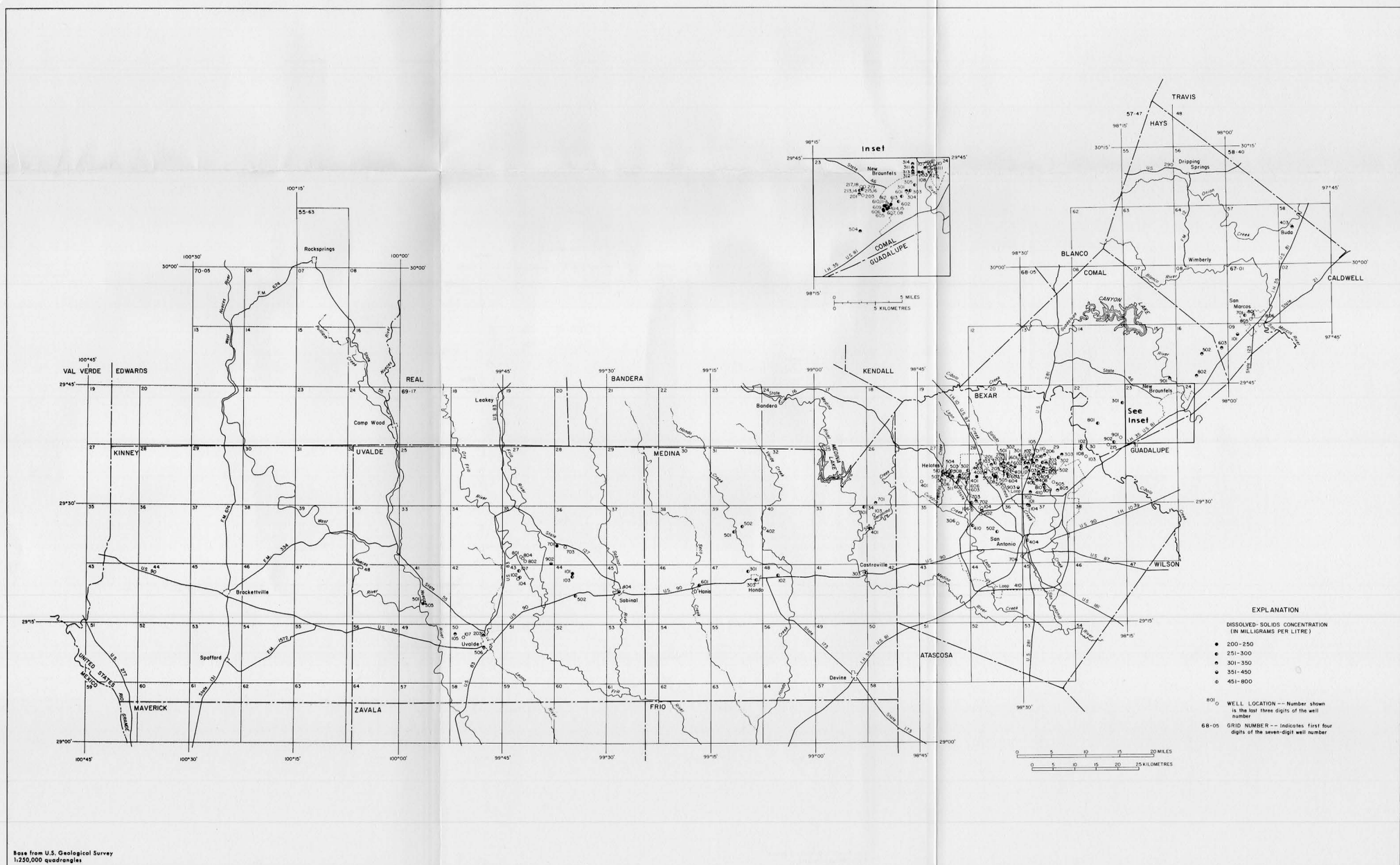
Site 36, Guadalupe River at Preiss Heights Park, 300 feet upstream from Kansas and Missouri Railroad bridge

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)
MAY 09, 1974	1340	--	--	58	17	--	--	235	0	17	14	--
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L) (00310)	IMME- DIATE COLI- FORM (COL. PER 100 ML) (31501)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	DIS- SOLVED ORGANIC CARBON (C) (MG/L) (00681)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	
MAY 09, 1974		20.0	--	--	--	168	10	89	7.0			



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

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



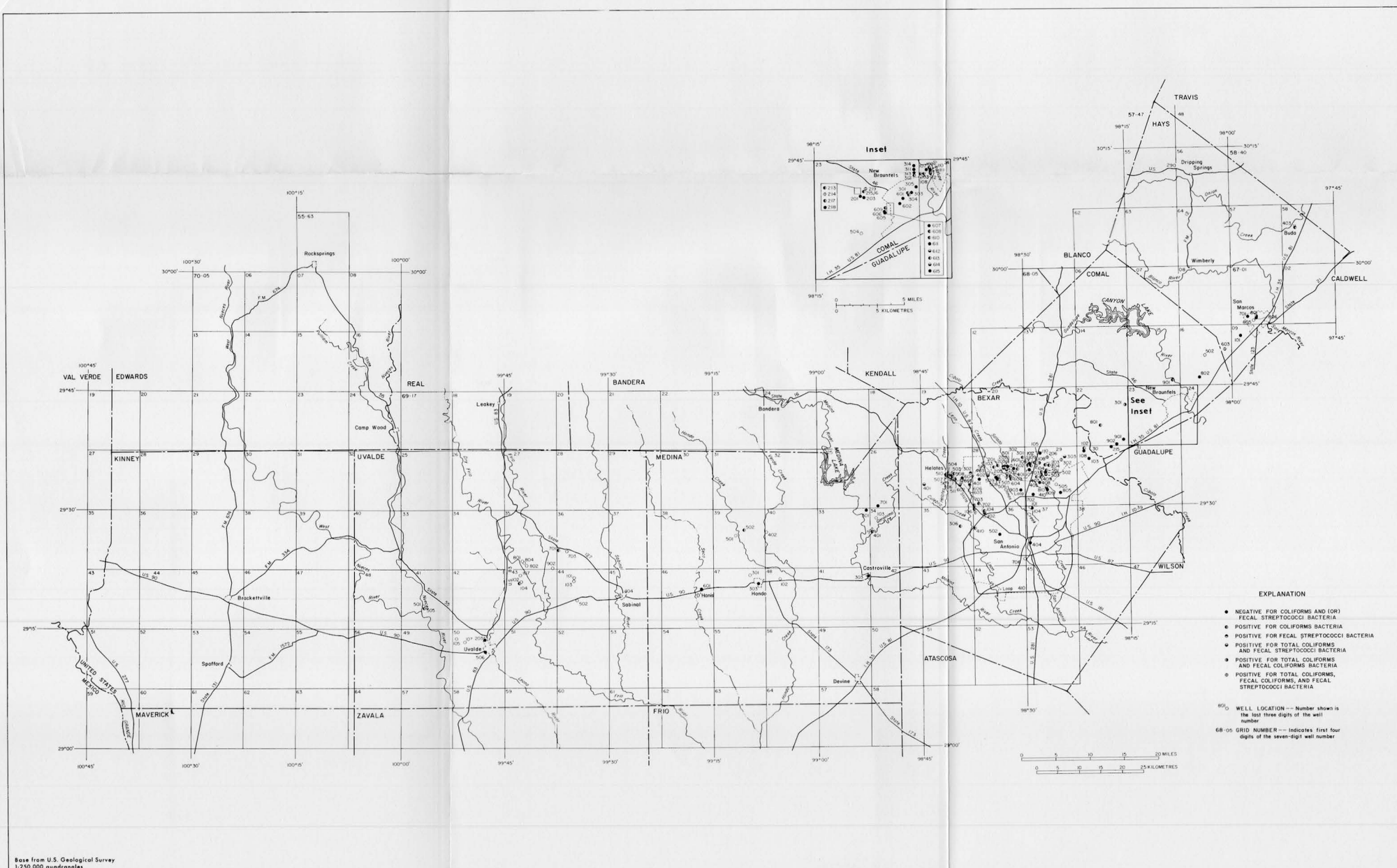
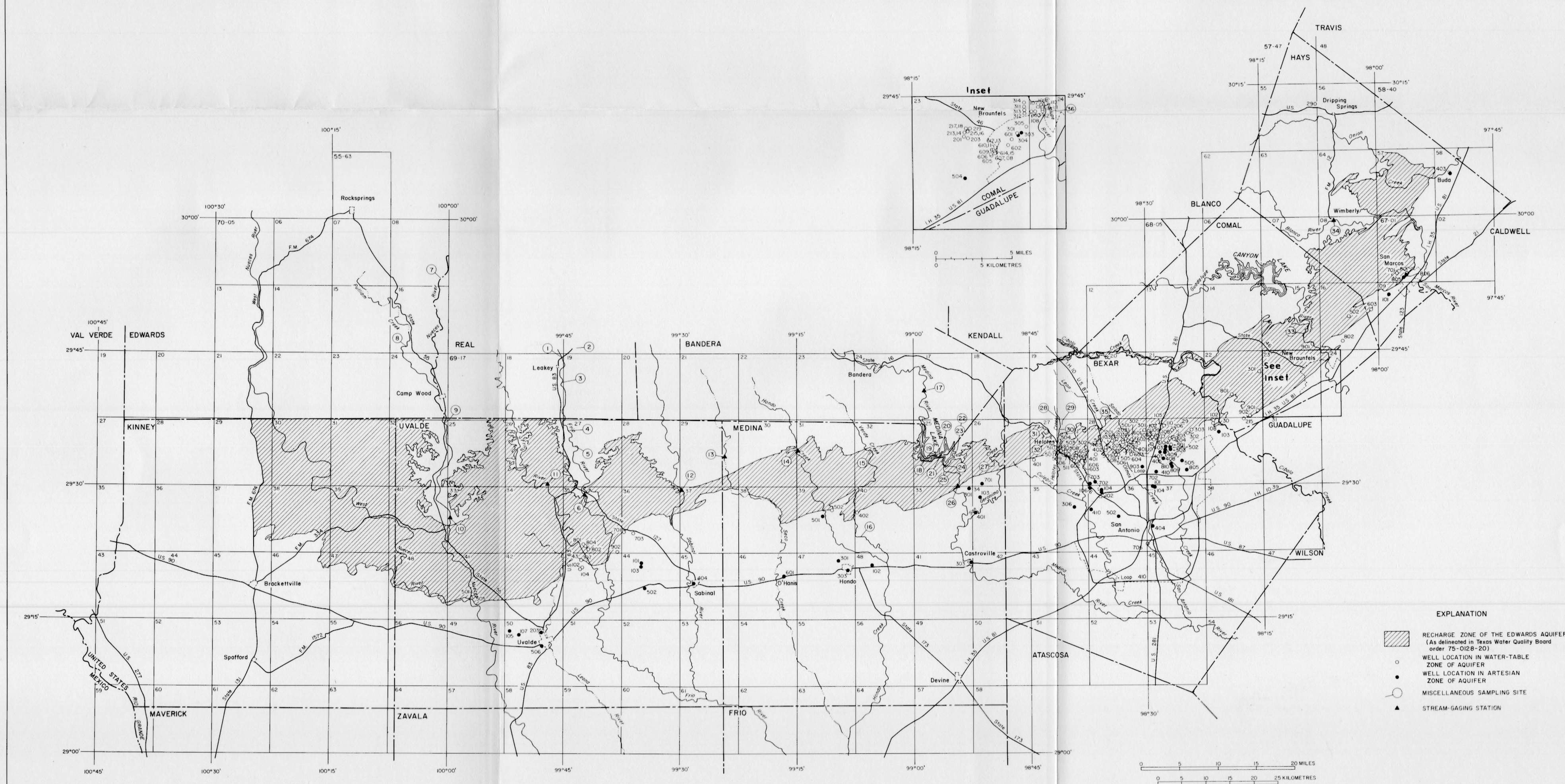


FIGURE 3.—Locations of wells and springs in which water samples have contained coliform, fecal coliform, and fecal streptococci bacteria

Note: Large-format versions of the original plates are on the following pages.



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

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

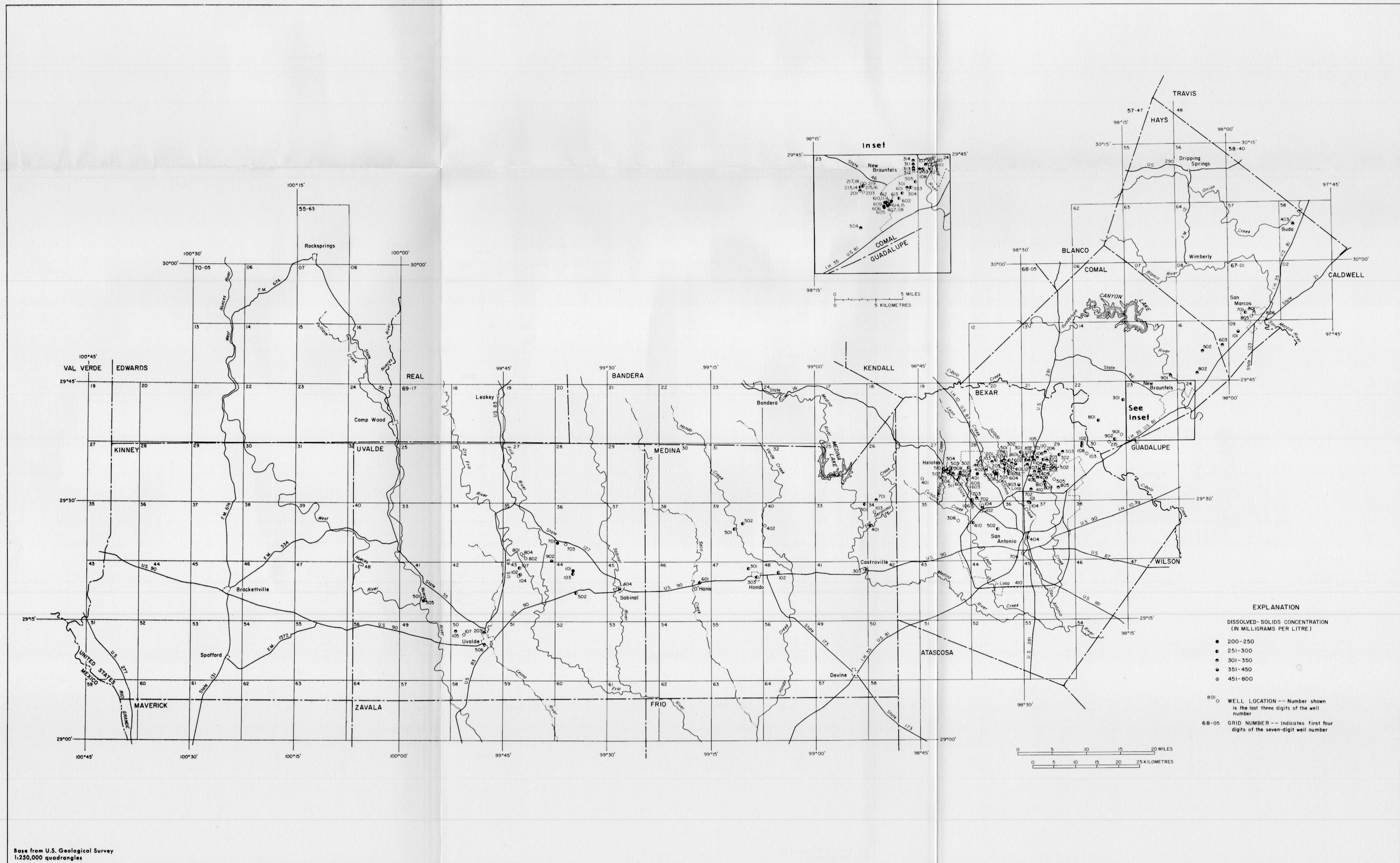


FIGURE 2.-Concentrations of dissolved solids in water from wells and springs

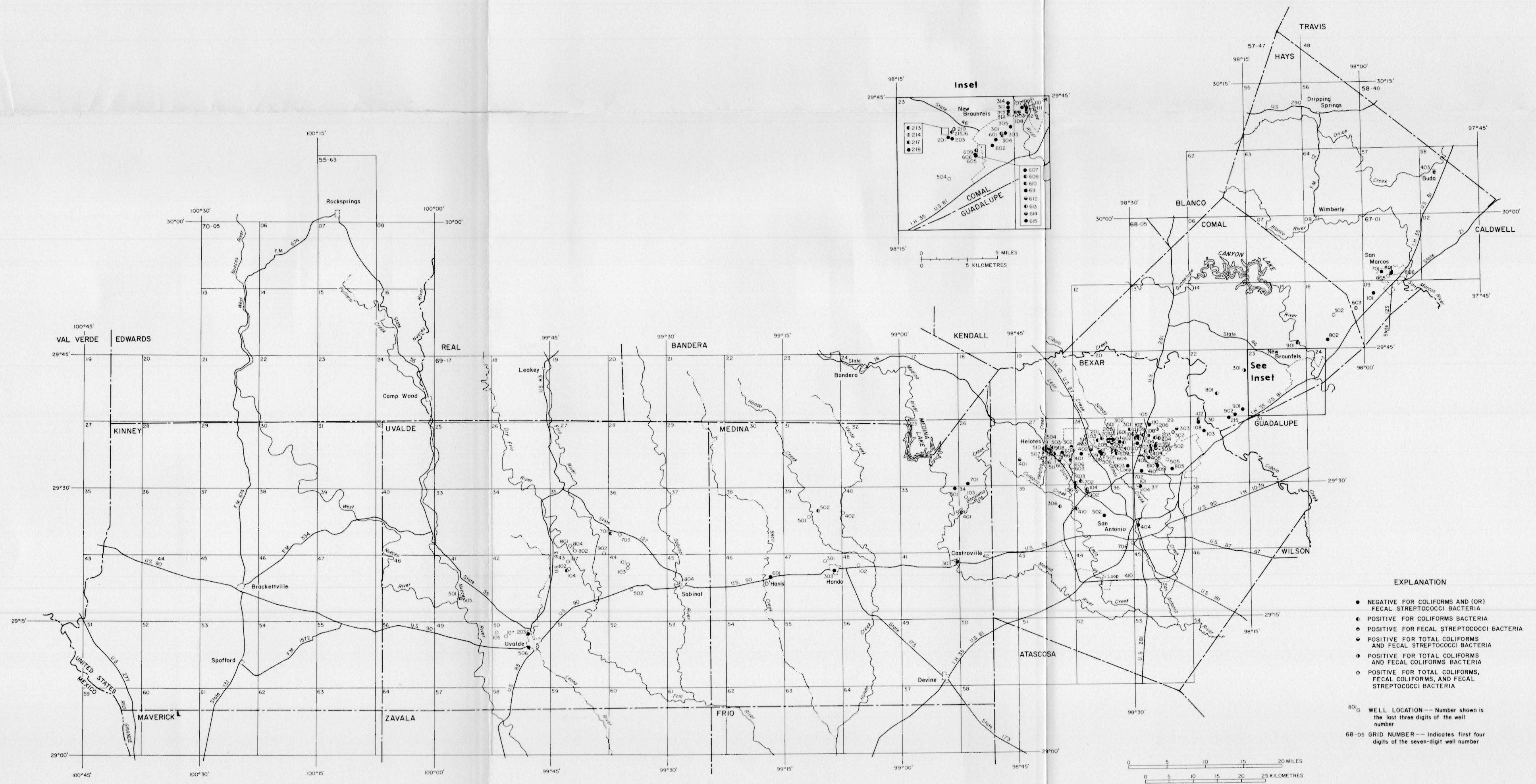


FIGURE 3.-Locations of wells and springs in which water samples have contained coliform, fecal coliform, and fecal streptococci bacteria